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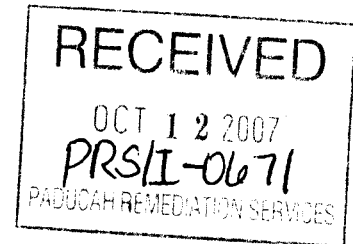
167

ERNIE FLETCHER  
GOVERNOR

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
DIVISION OF WASTE MANAGEMENT  
HAZARDOUS WASTE BRANCH  
14 REILLY ROAD  
FRANKFORT, KENTUCKY 40601  
www.kentucky.gov

TERESA J. HILL  
SECRETARY

October 9, 2007



Certified Mail Tracking Numbers: 7000 1670 0007 9753 3223  
7000 1670 0007 9753 1458

Mr. William E. Murphie, Manager  
US Department of Energy Portsmouth/Paducah Project Office  
PO Box 1410  
Paducah, Kentucky 42002

Mr. Russell Boyd  
Paducah Remediation Services LLC  
101 Liberty Drive, Suite #3  
Kevil, Kentucky 42053

RE: Notice of Permit Decision  
Paducah Gaseous Diffusion Plant  
Paducah, McCracken County, Kentucky  
KY8-890-008-982

Mr. Murphie and Mr. Boyd:

The Kentucky Division of Waste Management (Division) is in receipt of your revised Minor Modification Request dated September 21, 2007 (received September 24, 2007) and the revised packet (received October 8, 2007) to address new key personnel. The request identifies Mr. Russell Boyd as the new site manager, presents a revised Contingency Plan and a revised Organizational Chart and also recommends twelve minor clarifications (Items 3-14) to the permit. The Division has incorporated ten of the recommended clarifications and is proposing to postpone two of the clarifications (Items 4 and 13) to a future permit modification (for the reasons presented in the attached table).

The Division has also made numerous additional clarifications to the permit (some 64 changes, which include the ten recommended by DOE). These changes are itemized in the attached table. The Division has also made numerous changes to the various Appendix A tables. The revised tables are attached, along with a detailed discussion of all changes. Significant changes were also made to Appendix D – Schedule of Compliance. These changes reflect the most current enforceable milestones for specific corrective action documents (as established in the approved 2006 Site Management Plan and the associated FFA modifications). Other changes to Appendix D include rephrasing the terminology associated with vents and significant changes to the submittal time frames for various generic corrective action documents (under “Due Date”).

Kentucky

I-02000-0582

Mr. Murphie  
Mr. Boyd  
October 9, 2007  
Page 2

These changes were made to be consistent with the language in the permit conditions (and the associated regulations). A new Appendix F-9 has been added to reflect the Record of Decision for Interim Remedial Action for the Groundwater Operable Unit for Volatile Contamination at the C-400 Cleaning Building (dated July 2005).

Enclosed is a cover sheet for Modification #2 to the reissued Hazardous Waste Management Facility Permit and the modified permit (only those sections that were changed by this modification). Please insert the attached cover sheet and the modified permit in front of the most recent cover sheet for the reissued September 30, 2004 permit (issued to the U.S. Department of Energy (DOE) and Paducah Remediation Services, LLC). This is a minor modification and therefore no public notice was required.

If you are aggrieved by this decision, you may request a hearing. The request must be made in writing within thirty (30) days of your receipt of this decision and must conform to KRS 224.10-420(2). You are required by condition T-42, pg of 70 (formerly T-142, pg 25 of 69) of the attached permit and 401 KAR 38:070, Section 6 to keep records of all data used to complete the permit modification application for at least three (3) years.

If you have any questions or require additional information, please feel free to contact Brian Baker at (502) 564-6716.

Sincerely,



April J. Webb, P.E., Manager  
Hazardous Waste Branch

AJW/bkb/ksr

Enclosures:

Mr. Murphie  
Mr. Boyd  
October 9, 2007  
Page 3

c: David Williams, USEPA Region 4 [williams.david@epamail.epa.gov](mailto:williams.david@epamail.epa.gov)  
Jennifer Tufts, USEPA Region 4 [tuft.jennifer@epamail.epa.gov](mailto:tuft.jennifer@epamail.epa.gov)  
Dewey Crawford, CHFS-RHTAB [dewey.crawford@ky.gov](mailto:dewey.crawford@ky.gov)  
John Morgan, PRS [john.morgan@prs-llc.net](mailto:john.morgan@prs-llc.net)  
Rienhard Knerr, DOE-Paducah [reinhard.knerr@lex.doe.gov](mailto:reinhard.knerr@lex.doe.gov)  
John Volpe, CHFS-RHTAB [john\\_volpe@bellsouth.net](mailto:john_volpe@bellsouth.net)  
Rob Seifert, DOE [rob.seifert@lex.doe.gov](mailto:rob.seifert@lex.doe.gov)  
Michael Gerle, PRS [michael.gerle@prs-llc.net](mailto:michael.gerle@prs-llc.net)  
Myrna Redfield, PRS [myrna.redfield@prs-llc.net](mailto:myrna.redfield@prs-llc.net)  
Kim Crenshaw CAB [kimpgdpcab@bellsouth.net](mailto:kimpgdpcab@bellsouth.net)  
Dina Brown, DOE [dina.brown@lex.doe.gov](mailto:dina.brown@lex.doe.gov)  
Pilar Fondaw, DOE [pilar.fondaw@lex.doe.gov](mailto:pilar.fondaw@lex.doe.gov)  
Edward Winner, KDWM/HWB [edward.winner@ky.gov](mailto:edward.winner@ky.gov)  
Brian Baker, FFA-Frankfort [brian.baker@ky.gov](mailto:brian.baker@ky.gov)  
DOE Reading File/DWM 1062/APE20060013



Kentucky Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division of Waste Management

**HAZARDOUS WASTE MANAGEMENT FACILITY PERMIT  
MODIFICATION 2**

United States Department of Energy, Paducah Gaseous Diffusion Plant (PGDP), and  
Paducah Remediation Services, LLC  
5600 Hobbs Road  
West Paducah, Kentucky 42086

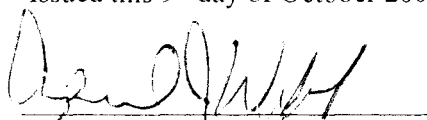
The Division of Waste Management hereby grants the above-named facility a permit modification to reflect the transfer of operational control at the PGDP. This permit modification has been issued under the provision of KRS Chapter 224 and 401 KAR 38:040, Section 2, effective March 12, 1997, and is subject to all conditions and operating limitations contained herein. Issuance of this permit modification does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet and/or other federal, state, and local agencies.

Part I	-Legal Authority
Part II	-Specific Conditions
Part III	-Standard Conditions
Part IV	-Corrective Action
Part V	-Waste Minimization
Part VI	-Land Disposal Restrictions
Part VII	-RCRA Air Emission Standards
Part VIII	-Referenced Attachments

No deviation from the plans and specifications submitted with your application or the conditions specified herein is allowed, unless authorized in writing from the Division of Waste Management. Violation of the terms and conditions specified herein shall render this permit null and void. All rights of inspection by representatives of the Division of Waste Management are reserved. Conformance with all applicable Waste Management Regulations is the responsibility of the permittee. Receipt of the permit fee and financial assurance specified below is hereby acknowledged.

PERMIT TYPE:	Operating	PERMIT NUMBER:	KY8-890-008-982
TYPE OF ACTIVITY:	Storage, Treatment & Post-closure	COUNTY:	McCracken
PERMIT FEE:	N/A	EFFECTIVE DATE:	November 9, 2007
CLOSURE AMOUNT:	N/A	EXPIRATION DATE:	October 31, 2014
POST-CLOSURE AMOUNT:	N/A		
CLOSURE INSTRUMENT:	N/A		
SUDDEN LIABILITY INSURANCE:	N/A		
HAZARDOUS WASTE MANAGEMENT UNITS:	Tanks, Containers and Landfill		
NON-SUDDEN LIABILITY INSURANCE:	N/A		

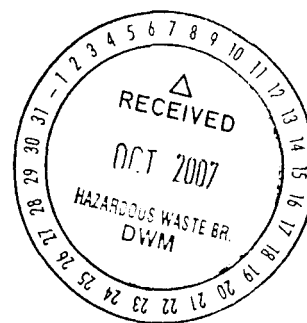
Issued this 9<sup>th</sup> day of October 2007

  
\_\_\_\_\_  
Manager  
Hazardous Waste Branch



## Department of Energy

Portsmouth/Paducah Project Office  
1017 Majestic Drive, Suite 200  
Lexington, Kentucky 40513  
(859) 219-4000



SEP 21 2007

Ms. Stefanie Osterman, Director  
Enforcement Branch  
Division of Waste Management  
Kentucky Department for Environmental Protection  
14 Reilly Road, Frankfort Office Park  
Frankfort, Kentucky 40601

PPPO-02-468-07

Mr. R. Bruce Scott, Director  
Division of Waste Management  
Kentucky Department for Environmental Protection  
14 Reilly Road, Frankfort Office Park  
Frankfort, Kentucky 40601

Dear Ms. Osterman and Mr. Scott:

**MINOR MODIFICATION REQUEST TO CHANGE KEY PERSONNEL IDENTIFIED  
IN ATTACHMENT G, CONTINGENCY PLAN IN HAZARDOUS WASTE FACILITY  
PERMIT NUMBER KY8-890-008-982, AGENCY INTEREST NUMBER 3059**

Reference: Letter from A. Webb to W. Murphie and R. Boyd, "Minor Modification Request  
Change to Key Personnel," dated March 7, 2007

The U.S. Department of Energy (DOE) and Paducah Remediation Services, LLC (PRS) are requesting two sets of minor modifications to Hazardous Waste Facility Permit Number KY8-890-008-982. The first set of minor modifications, which require approval of the Cabinet, addresses the appointment of Mr. Russell Boyd as site manager and responsible corporate officer. Please find enclosed the following documents in support of this request to change key personnel:

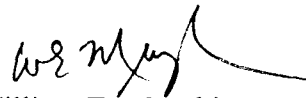
1. Certification statements from DOE and PRS pursuant to 401 KAR 38:070, Section 7 (Enclosure 1).
2. The Revised Contingency Plan (pages G-1 and G-5), referenced as Attachment G of the permit, (Enclosure 2).
3. Disclosure Statement (Form DEP 7087) for the Applicant in accordance with KRS § 224.40-330 (Enclosure 3).
4. Revised Organizational Chart for Paducah Remediation Services, LLC that updates the Permit Application, page B-17 (Enclosure 4).
5. Notification of Class I Modification (DEP 7092) pursuant to 401 KAR 38:040, Section 2 (Enclosure 5).

The second set of minor modifications addresses proposals to clarify or correct certain permit conditions. The Kentucky Department for Environmental Protection (KDEP), in its March 7, 2007, letter, recommended that DOE revisit the proposed changes to the permit that DOE made during a meeting between KDEP and DOE on October 14, 2004, and that DOE request a modification of the permit if the changes proposed in the 2004 meeting are still warranted. The permittees have reviewed those changes and believe they are still warranted. Accordingly, DOE and PRS are requesting a minor modification, which does not require approval of the Cabinet, to effect those changes. Please find enclosed the following documents in support of the request to clarify or correct the text of certain permit conditions:

5. Notification of Class I Modification (DEP 7092) pursuant to 401 KAR 38:040, Section 2 (Enclosure 5).
6. A description of text corrections or clarifications to permit conditions (Enclosure 6).

A permit modification fee is also enclosed. If you have any questions or require additional information, please call Rob Seifert at (270) 441-6823.

Sincerely,



William E. Murphie  
Manager  
Portsmouth/Paducah Project Office

Enclosures:

1. Certification Statement
2. Revised Contingency Plan, Pages G-1 and G-5
3. Disclosure Statements (Form DEP 7087)
4. Revised PRS Organizational Chart
5. Notification of Class I Modification
6. Text Corrections or Clarifications to Permit Conditions
7. Permit Modification Fee

cc w/enclosures:

DCC/Kevil  
R. Blumenfeld, PPPO/LEX  
R. Seifert, PPPO/PAD  
E. Winner, KDEP/Frankfort

cc w/o enclosures:

B. Baker, KDEP/Frankfort  
P. Coutts, PRS/Kevil  
M. Gerle, PRS/Kevil  
R. Knerr, PPPO/PAD  
J. Miller, PRC/PAD  
J. Morgan, PRS/Kevil  
M. Redfield, PRS/Kevil

Enclosure 1

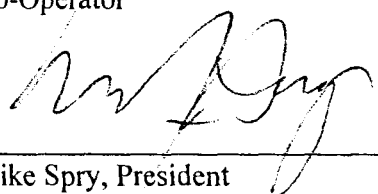
Certification Statement from DOE and PRS

## CERTIFICATION

Document Identification: **MINOR MODIFICATION REQUEST TO CHANGE KEY PERSONNEL IDENTIFIED IN ATTACHMENT G, CONTINGENCY PLAN IN HAZARDOUS WASTE FACILITY PERMIT NUMBER KY8-890-008-982, AGENCY INTEREST NUMBER 3059**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

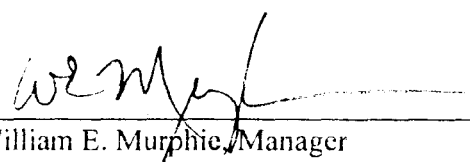
Paducah Remediation Services LLC  
Co-Operator

  
\_\_\_\_\_  
Mike Spry, President

8/20/07  
\_\_\_\_\_  
Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

U.S. Department of Energy (DOE)  
Owner and Operator

  
\_\_\_\_\_  
William E. Murphy, Manager  
Portsmouth/Paducah Project Office

9/21/07  
\_\_\_\_\_  
Date



Enclosure 2  
Revised Contingency Plan

## PART G

### CONTINGENCY PLAN

#### 1. INTRODUCTION

This Contingency Plan is for the Paducah Gaseous Diffusion Plant (PGDP) hazardous waste facilities, which are owned by the Department of Energy (DOE)<sup>1</sup> and operated under contract with Paducah Remediation Services, LLC (PRS). PGDP is located in McCracken County, Kentucky, near U.S. Highway 60 on a federally owned reservation. Figure 1 shows a general plan of the facility.

All Resource Conservation and Recovery Act (RCRA)-permitted treatment and storage facilities at PGDP are owned by DOE and operated by PRS. The point of contact for DOE is:

Mr. William E. Murphie  
Manager Portsmouth/Paducah Project Office  
U.S. Department of Energy  
1017 Majestic Drive, Suite 200  
Lexington, Kentucky 40513

The primary contact for PGDP's hazardous waste storage and treatment activities is:

Mr. Russell Boyd  
Site Manager  
Paducah Remediation Services, LLC  
101 Liberty Drive, Suite #3  
Kevil, Kentucky 42053

The RCRA Emergency Response organization at PGDP includes representatives from both PRS and the United States Enrichment Corporation (USEC). The Plant Shift Superintendent (PSS), or designee, directs initial emergency response activities.

The USEC Emergency Response Organization provides initial emergency response services including fire fighting, emergency medical response, hazardous material incident response, rescue, salvage, and radiological response. These services are provided for under a work authorization document between USEC and DOE. A work authorization document is a purchase agreement between DOE and USEC. Services are purchased by DOE to perform the above-mentioned activities (included in this agreement are the supporting USEC procedures). This service will be provided upon request or upon automatic alarm to all DOE/PRS facilities. The PSS, or his designee, will contact PRS's Site Manager, Russell Boyd, or his designee, if the emergency involves any RCRA-permitted facilities or DOE waste accumulation areas. PRS will direct the recovery phase (final stage of RCRA emergency response).

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<sup>1</sup> For purposes of this application, the acronym DOE refers to the Department of Energy Paducah Site.

## 2. EMERGENCY COORDINATORS

If an emergency situation occurs at PGDP hazardous waste storage and treatment facilities, the person discovering the emergency contacts the PSS who is the Emergency Coordinator. A PSS is on duty 24-hours a day, seven days a week. At least one PSS is on duty at the facility at all times and can be contacted at (270) 441-6211 at the C-300 Plant Control Center.

The responsibility for control of initial emergency response at PGDP is vested in the PSS. All emergency plans and procedures are readily available to the PSS, who has complete authority to commit all resources at PGDP in the event of an emergency. He will remain in command of initial response activities. The PRS Site Manager, or his designee, will be contacted by the PSS in the event an emergency involves any RCRA-permitted facilities or DOE accumulation areas. This notification is administrative in purpose only. The PSS is responsible for initial emergency response activities. The PSS is also authorized to activate the provisions of mutual aid agreements held with other organizations. The emergency coordinator is the same individual identified as the on-scene commander by Occupational Safety and Health Act (OSHA) and as the incident commander or fire ground commander by the National Fire Protection Association (NFPA). PRS or their designee will coordinate the final emergency response activities (recovery phase).

The PSS personnel are listed below. This list is reviewed on an annual basis to ensure information is correct.

**Table 1. PSS Personnel.**

Shift	Name	Phone	Building
Shift Operations Mgr.	D. E. Page	(270) 441-6211	C-300
PSS		(270) 441-6211	C-300
Relief PSS		(270) 441-6211	C-300

P. G. Brown Rural Route 2, P. O. Box 316 Bardwell, KY 42023 (270) 642-2140	W. F. Cage 1198 N. Ballard Church Road Wickliffe, KY 42087 (270) 335-3662	M. C. Maurer 41 Hilanoa Addition Metropolis, IL 62960 (618) 524-8634
R. J. Cook 2204 Creekwood Drive Murray, KY 42071 (270) 767-0765	B. W. Wallace 145 Pioneer Lane Calvert City, KY 42029 (270) 898-3992	D. E. Page (Shift Operations Manager) 350 Ashcreek Road Paducah, KY 42001 (270) 554-8293
T. B. Hudson 265 Maynor Lane LaCenter, KY 42056 (270) 665-8383	C. Pittman 140 Cassie Circle West Paducah, KY 42086 (270) 744-9268	K. A. Beasley 925 Cindy Drive Paducah, KY 42003 (270) 898-3850

Enclosure 3

Disclosure Statement  
(Form DEP 7087)



**ENVIRONMENTAL AND  
PUBLIC PROTECTION CABINET**  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
DIVISION OF WASTE MANAGEMENT  
14 REILLY ROAD  
FRANKFORT, KY 40601  
TELEPHONE NUMBER (502) 564-6716

**Disclosure Statement  
Form DEP 7087 (1/07)**

1. **APPLICABILITY** – This form must be complete and submitted to the Cabinet by persons requesting the issuance, renewal or transfer of a permit for a solid waste management facility pursuant to KRS 224.40-330.
2. **ASSISTANCE** – Questions regarding this form may be directed in writing to the Division of Waste Management, Solid Waste Branch at the address listed above or by calling (502) 564-6716.
3. **SUBMISSION** – Submit the original of the completed Disclosure Statement form to the Division of Waste Management at the address listed above. If an item is not applicable, check the appropriate box or write “N/A” in the space provided. Please type or print legibly in permanent ink.
4. **FILING FEES** – Fees are not applicable for disclosure.
5. **LAWS AND REGULATIONS** – Applicants are expected to understand and comply with all applicable laws and regulations.

Statutes and regulations may be viewed online at the following website address:

<http://www.lrc.ky.gov/search.htm>

Solid waste application forms are available at the following website address:

<http://www.waste.ky.gov/forms/>

Statutes and regulations may be ordered at the following website address:

[http://lrc.ky.gov/kar/ORDER\\_FORM.htm](http://lrc.ky.gov/kar/ORDER_FORM.htm)

## Applicant Disclosure Statement

The Applicant is the person, partnership, association, company, corporation, government agency, etc., which owns or operates the facility.

Type or print your responses legibly in indelible ink.

1. ☐ New Facility - A Permit and Agency Interest number will be assigned by the Cabinet.  
 2. ☒ This is updated disclosure information for one or more existing facilities.

3. Applicant's complete name: Paducah Remediation Services, LLC

4. Applicant's mailing address: 761 Veterans Avenue

5. State of Incorporation or Application: Kentucky

6. City: Keok 7. State: KY 8. Zip Code: 42053

9. Contact Person: Russell Boyd 10. Title: Site Manager

11. Phone #: (270) 441-5030 12. Cell #: (270) 816-4215 13. Fax #: (270) 441-5022

14. E-Mail Address: russell.boyd@prs-llc.net

15. When updating disclosure information for one or more Kentucky facilities, list all of the applicable sites and include the Agency Interest # and historic permit # for each site in the following table: Provide this data as **Attachment 1** if additional pages are necessary.

Site Name	Agency Interest #	Permit #
1. Paducah Gaseous Diffusion Plant	3059	KY-8-890-008-982
2.		
3.		
4.		-
5.		-
6.		-
7.		-
8.		-
9.		-
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17.		-
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## Attachments

16. Provide as **Attachment 2**, a description of the applicant's and the applicant's key personnel's experience in managing solid waste including any past or present permits or licenses held by the applicant or the applicant's key personnel within the previous five (5) years.

If not applicable, check here. ☐

17. Provide as **Attachment 3**, a description of the applicant's and the applicant's key personnel's experience in managing hazardous waste including any past or present permits or licenses held by the applicant within the previous five (5) years.

If not applicable, check here. ☐

18. Provide as **Attachment 4**, a description of all civil and administrative complaints against the registrant and its key personnel for the violation of any state or federal environmental protection law that have resulted in a fine or penalty of more than one thousand dollars (\$1,000) within five (5) years before the date of the submission of this application.

Each description shall include the following: the style of the complaint, the case, file, or other identifying number, the identity of all parties named in the complaint, the forum in which the complaint was filed, the identity of each state or federal agency involved with or named in the complaint, the amount of the fine or penalty, whether the fine or penalty has been paid, the identity and description of each law or regulation violated or alleged to have been violated and upon which the fine or penalty is based; and state whether the fine was the result of settlement or agreed order, an administrative order, or a court judgment. If litigation is ongoing, describe any orders or judgments entered and describe the current status of the litigation.

If not applicable, check here. ☒

19. Provide as **Attachment 5**, a description of all civil and administrative complaints against the applicant and its key personnel for the violation of any state or federal environmental protection law that allege an act or omission that constitutes a violation of a state or federal environmental protection law and that presented a substantial endangerment to the public health or the environment.

Each description shall include the following: the style of the complaint, the case, file, or other identifying number, the identities of each party to the complaint, the forum in which the complaint was brought, the identity of each state or federal agency involved with or named in the complaint, an explanation of the alleged act or omission, the identity and a description of the environmental protection law or regulation alleged to have been violated, an explanation of all corrective action measures performed to correct or mitigate the alleged violation, and a description of the alleged endangerment to public health or to the environment. State whether the issues raised in the complaint have been resolved and whether the resolution was the result of a settlement or agreement, an administrative order, or a court order of judgment. If litigation on the allegation is ongoing, describe any orders or judgments entered and describe the present status of the litigation.

If not applicable, check here. ☒

20. Provide as **Attachment 6**, a description of all pending criminal complaints alleging the violation of any state or federal environmental protection law that have been filed against the applicant and its key personnel within five (5) years before the date of submission of this application.

Each description shall include the following: the style of the case and the identifying case number, the date the complaint was filed, the forum in which the complaint is pending, the identity of the law or regulation allegedly violated and a narrative description of the law or regulation, whether the alleged violation is a misdemeanor or a felony, and all actions and pleadings which have occurred or have been filed in association with the complaint.

If not applicable, check here. ☒

21. Provide as **Attachment 7**, a description of all judgments of criminal conviction entered against the applicant and its key personnel within five (5) years before the date of submission of this application for the violation of any state or federal environmental protection law.

Each description shall include the following: style, case number, forum in which the complaint was entered, date of judgment, sentence imposed, the identity and a description of each law the applicant was convicted of violating, whether the conviction was the result of a plea agreement or a trial, and, if currently on appeal, the status of the appeal.

If not applicable, check here. ☒

22. Provide as **Attachment 8**, a description of all judgments of criminal conviction of a felony under the laws of any state or the United States that are entered against the applicant and its key personnel within five (5) years before the date of submission of this application.

Each description shall include the following: style, case number, forum in which the complaint was entered, date of judgment, sentence imposed, the identity and a description of each law the applicant was convicted of violating, whether the conviction was the result of a plea agreement or a trial, and, if currently on appeal, the status of the appeal.

If not applicable, check here. ☒

23. Provide as **Attachment 9**, a list of the names and addresses of all waste sites or facilities and solid waste management facilities in which the applicant or any of its key personnel has a financial or equitable interest, or is an officer, director, or manager.

If not applicable, check here. ☒



24. As defined by KRS 224.01-010(44), provide the names of all key personnel and their titles or positions. Provide this data as **Attachment 10** if additional pages are necessary.

A completed Key Personnel Disclosure Statement must be submitted for each individual listed as a Key Person. Sole proprietors and government agencies are not required to submit key personnel disclosure statements. **If not applicable, check here.** ☐

Key Person	Title/Position
1. Mike Spry	President
2. Russell Boyd	Site Manager
3.	
4.	
5.	
6.	
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## Applicant Certification Statement & Signature

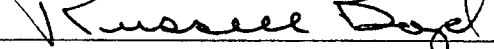
25. Pursuant to 401 KAR 47:160, Section 6, a responsible official (company owner, corporate officer, mayor, county judge executive, LLC member or other authorized official) must sign the certification statement below.

**NOTE: Consultants or other persons that do not conform to the statutory definition of a "responsible official" may not sign the following certification statement unless that person possesses and supplies a copy of a Power of Attorney.**

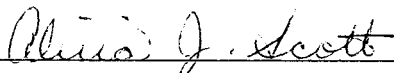
**"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations."**

Name of Signatory (type or print): Russell Boyd

Title of Signatory (type or print): Site Manager

Signature of Applicant:  Date: 8-23-2007

Subscribed and sworn to before me this 23rd day of August, Year 2007

Notary Public Signature 

State of Ky County of Ballard My commission expires April 30, 2008  
State at Large

## KEY PERSONNEL DISCLOSURE STATEMENT

All key personnel are required to submit the following information to the Cabinet.

**Sole proprietors (a private owner) and government agencies are exempt.**

26. Key Person (print): Russell Boyd
27. Mailing Address: 761 Veterans Avenue
28. City: Kevil 29. State: Kentucky 30. Zip Code: 42053
31. Phone #: (270) 441-5030 32. Fax #: (270) 441-5022 33. Cell #: (270) 816-4215
34. E-Mail Address: russell.boyd@prs-llc.net
35. What is the relationship between the registrant and key person? See KRS 224.010-010(44).
- ☐ Partner ☐ Shareholder ☒ Corporate Official ☐ LLC Member
- ☐ Other (describe): \_\_\_\_\_

### Attachments

36. Provide as **Attachment 11**, a description of the key person's experience in managing solid waste including any past or present permits or licenses held by the key person within the previous five (5) years.
- If not applicable, check here. ☐
37. Provide as **Attachment 12**, a description of the key person's experience in managing hazardous waste including any past or present permits or licenses held by the key person within the previous five (5) years.
- If not applicable, check here. ☐
38. Provide as **Attachment 13**, a description of all civil and administrative complaints against the key person for the violation of any state or federal environmental protection law that have resulted in a fine or penalty of more than one thousand dollars (\$1,000) within five (5) years before the date of the submission of this application.

Each description shall include the following: the style of the complaint, the case, file, or other identifying number, the identity of all parties named in the complaint, the forum in which the complaint was filed, the identity of each state or federal agency involved with or named in the complaint, the amount of the fine or penalty, whether the fine or penalty has been paid, the identity and description of each law or regulation violated or alleged to have been violated and upon which the fine or penalty is based; and state whether the fine was the result of settlement or agreed order, an administrative order, or a court judgment. If litigation is ongoing, describe any orders or judgments entered and describe the current status of the litigation.

If not applicable, check here. ☒

39. Provide as **Attachment 14**, a description of all civil and administrative complaints against the key person for the violation of any state or federal environmental protection law that allege an act or omission that constitutes a violation of a state or federal environmental protection law and that presented a substantial endangerment to the public health or the environment.

Each description shall include the following: the style of the complaint, the case, file, or other identifying number, the identities of each party to the complaint, the forum in which the complaint was brought, the identity of each state or federal agency involved with or named in the complaint, an explanation of the alleged act or omission, the identity and a description of the environmental protection law or regulation alleged to have been violated, an explanation of all corrective action measures performed to correct or mitigate the alleged violation, and a description of the alleged endangerment to public health or to the environment. State whether the issues raised in the complaint have been resolved and whether the resolution was the result of a settlement or agreement, an administrative order, or a court order of judgment. If litigation on the allegation is ongoing, describe any orders or judgments entered and describe the present status of the litigation.

If not applicable, check here. ☒

40. Provide as **Attachment 15**, a description of all pending criminal complaints alleging the violation of any state or federal environmental protection law that have been filed against the key person within five (5) years before the date of submission of this application.

Each description shall include the following: the style of the case and the identifying case number, the date the complaint was filed, the forum in which the complaint is pending, the identity of the law or regulation allegedly violated and a narrative description of the law or regulation, whether the alleged violation is a misdemeanor or a felony, and all actions and pleadings which have occurred or have been filed in association with the complaint.

If not applicable, check here. ☒

41. Provide as **Attachment 16**, a description of all judgments of criminal conviction entered against the key person within five (5) years before the date of submission of this application for the violation of any state or federal environmental protection law.

Each description shall include the following: style, case number, forum in which the complaint was entered, date of judgment, sentence imposed, the identity and a description of each law the key person was convicted of violating, whether the conviction was the result of a plea agreement or a trial, and, if currently on appeal, the status of the appeal.

If not applicable, check here. ☒

42. Provide as **Attachment 17**, a description of all judgments of criminal conviction of a felony under the laws of any state or the United States that are entered against the key person within five (5) years before the date of submission of this application.

Each description shall include the following: style, case number, forum in which the complaint was entered, date of judgment, sentence imposed, the identity and a description of each law the key person was convicted of violating, whether the conviction was the result of a plea agreement or a trial, and, if currently on appeal, the status of the appeal.

If not applicable, check here. ☒

43. Provide as **Attachment 18**, a list of the names and addresses of all waste sites or facilities and solid waste management facilities in which the key person has a financial or equitable interest, or is an officer, director, or manager.

If not applicable, check here. ☒

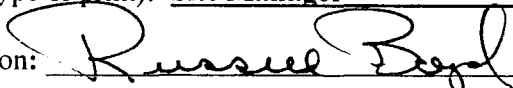
### Key Personnel Certification Statement & Signature

44. Pursuant to 401 KAR 47:160, Section 6(4), the Key Person must sign this item.

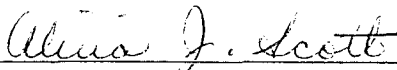
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations."

Name of Key Person (type or print): Russell Boyd

Title of Key Person (type or print): Site Manager

Signature of Key Person:  Date: 8-23-2007

Subscribed and sworn to before me this 23rd day of August, Year 2007

Notary Public Signature 

State of Ky County of Ballard My commission expires April 30, 2008  
State of Large

**ATTACHMENT TO FORM 7087**  
**PADUCAH REMEDIATION SERVICES, LLC**

**ATTACHMENT 2**

The applicant, Paducah Remediation Service, LLC, (PRS) is a joint venture between Portage Environmental, Inc. (Portage) and Shaw Environmental, Inc. (Shaw). By letter from the Division of Waste Management (DWM), dated April 21, 2006, PRS was added as the Operator of the Paducah Gaseous Diffusion Plant (PDGP) Solid Waste Permit effective 12:01 am on April 24, 2006.

The experience of the applicant's key personnel in managing solid waste is reflected in the Key Personnel Disclosure Statement.

**ATTACHMENT 3**

The experience of the applicant's key personnel in managing hazardous waste is reflected in the Key Personnel Disclosure Statement.

**ATTACHMENT 11 – Russell Boyd**

2002-2004 Vice President and Director of Operations managing project and program managers on more than 30 remediation and D&D projects including solid waste and asbestos waste management.

1995-2001 Deputy Manager of Operations, Rocky Flats, managing operations driving the cleanup and disposal, including design/construction of a RCRA Subtitle D Landfill.

Mr. Russell Boyd has not held any solid waste permits. He is a licensed professional engineer in the State of Georgia.

**ATTACHMENT 12 – Russell Boyd**

2002-2004 Vice President and Director of Operations managing project and program managers on more than 30 remediation and D&D projects including hazardous waste site clean-ups.

1995-2001 Deputy Manager of Operations, Rocky Flats, managing operations driving the cleanup and disposal, including the management of RCRA mixed waste treatment, storage, and disposal facilities.

DEP 7087 (1/07)

Mr. Russell Boyd has not held any hazardous waste permits. He is a licensed professional engineer in the State of Georgia.

Enclosure 4

Revised Organizational Chart for PRS



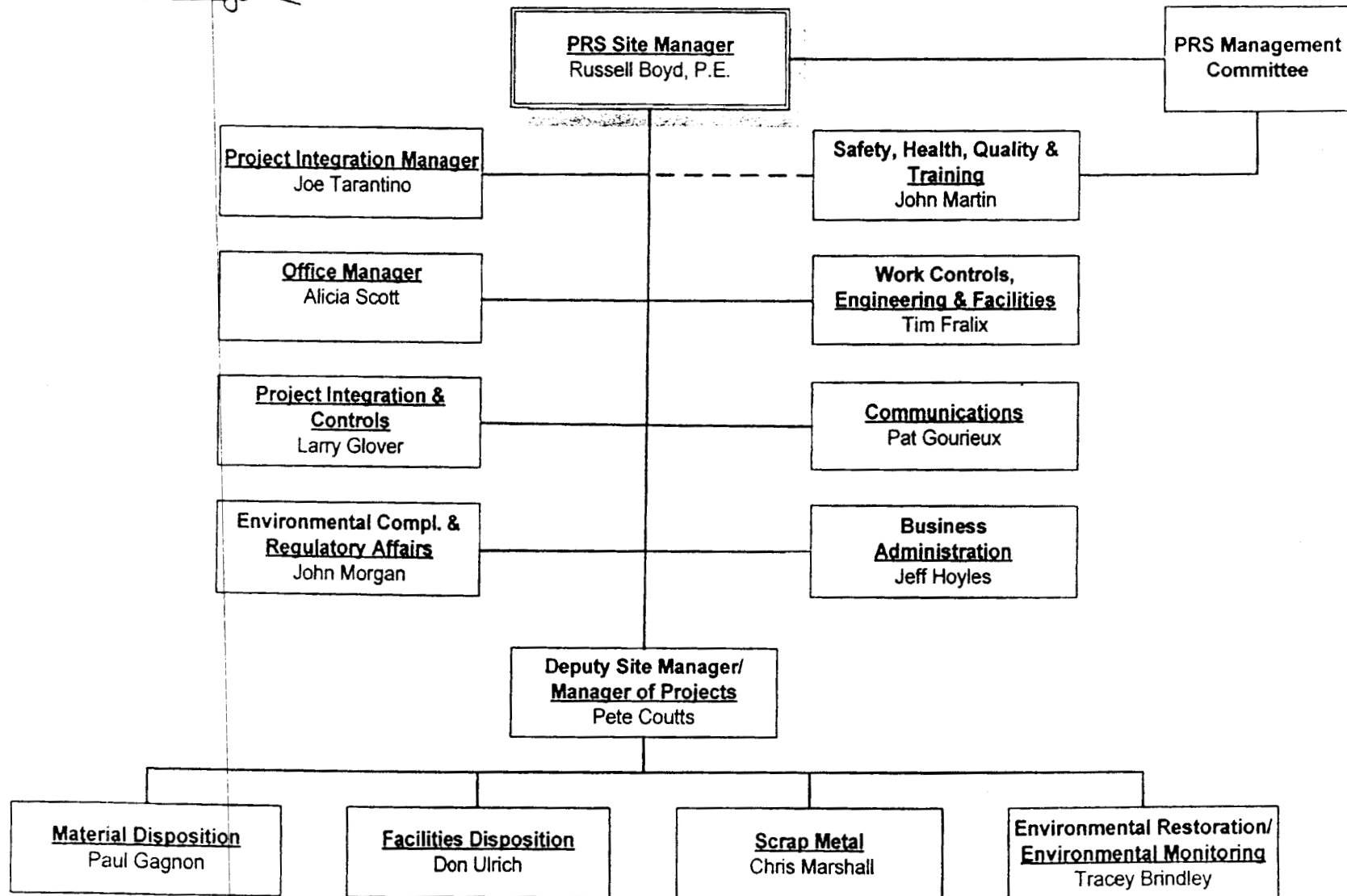
# Paducah Remediation Services, LLC

## Organization Chart

March 15, 2007

Approved:

*Russell Boyd*



Enclosure 5

Notification of Class I Modification  
(DEP 7092)

<b>KY ENVIRONMENTAL and PUBLIC PROTECTION CABINET</b> Department for Environmental Protection - Division of Waste Management Hazardous Waste Branch 14 Reilly Road - Frankfort, Kentucky 40601  <b>NOTIFICATION OF CLASS I MODIFICATIONS TO HAZARDOUS WASTE PERMITS NOT REQUIRING PRIOR APPROVAL OF THE CABINET</b>												DO NOT WRITE IN THIS SPACE			
Installation's EPA ID Number:				K	Y	8	8	9	0	0	0	8	9	8	2
FEE SUBMITTED: \$						FOR OFFICIAL USE ONLY: Receipt No.						Date:			
1. Name of Facility: Paducah Gaseous Diffusion Plant															
2. Location of Facility: 5600 Hobbs Road															
City: Kevil				State: KY				Zip: 42053							
3. Modification Serial Number: II															
4. Date of Permit Expiration: 10/31/14															
5. Class I Modification(s) put into effect under the provisions of 401 KAR 38:040 Section 2 (2); 40 CFR 270.42 ____.															
6. Itemized Modifications: (See Instructions)															
ITEM NO.	AFFECTED PERMIT CONDITION OR ATTACHMENT				PAGE NUMBER IN THIS PACKAGE				EFFECTIVE DATE				COMMENTS		
1	Attachment C Contingency Plan**				Replace page G-1 & G-5 w/Enclosure 2				March 15, 2007				Change in Site Manager		
2	Attachment B				Replace page B-17 w/Enclosure 4				March 15, 2007				Organizational Chart		
3	Condition T9, Page 2				Enclosure 6								Correct inconsistency w/Part A		

\*\*This item requires KDWM approval.

7. CERTIFICATION: I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS. THAT BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THAT THE SUBMITTED INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

SIGNATURE OF AUTHORIZED AGENT: *Michael J. Smy* DATE: 8/20/07

NAME OF AUTHORIZED AGENT (PLEASE TYPE): Michael J. Smy, President

TITLE: President

8. SUBSCRIBED AND SWORN BEFORE ME BY:

THIS THE 20th DAY OF August, 20 07.

NOTARY PUBLIC SIGNATURE: *William J. Smith*

MY COMMISSION EXPIRES: April 30, 2008

## 6. Itemized Modifications: (Continued)

ITEM NO.	AFFECTED PERMIT CONDITION OR ATTACHMENT	PAGE NUMBER IN THIS PACKAGE	EFFECTIVE DATE	COMMENTS
4	Condition T-14 Page 3	Enclosure 6		Place as reserved condition same as T-12
5	Condition T-30 Page 6	Enclosure 6		Correct reference
6	Condition T-84 Page 15	Enclosure 6		Correct typo
7	Condition T-133 Page 23	Enclosure 6		Provide clarification
8	Condition T-142 Page 25	Enclosure 6		Correct title
9	Condition T-147 Page 26	Enclosure 6		Correct typo
10	Condition T-4 Page 48	Enclosure 6		Correct inconsistency w/Part A
11	Condition T-14 Page 50	Enclosure 6		Provide clarification
12	Condition T-37 Page 64	Enclosure 6		Provide for 2 reports to be submitted concurrently
13	Condition T-41 Page 65	Enclosure 6		Request clarification
14	Condition T-42 Page 65	Enclosure 6		Request clarification

ITEM NO.:

FACILITY: Paducah Gaseous Diffusion Plant

LOCATION: 5600 Hobbs Road  
Kevil, KY 42053

EPA ID NUMBER: KY8-890-008-982

PERMIT MODIFICATION SERIAL NO.: II

**9. DESCRIPTION OF MODIFICATION:**

The modification updates and/or clarifies information contained in the Hazardous Waste Facility Operating Permit KY8-890-008-982.

GENERAL INSTRUCTIONS FOR THE  
NOTIFICATION OF CLASS I  
MODIFICATIONS TO HAZARDOUS  
WASTE PERMITS

**NOTE:** Instructions are provided only for categories in the Notification of Class I (Minor) Modifications to Hazardous Waste Permits form which are not self-explanatory. If you have questions about any information category, please call the Division of Waste Management at (502) 564-6716 and ask for the Hazardous Waste Branch. The form must be typed.

**CATEGORY / INSTRUCTIONS:**

**FEE SUBMITTED:** Complete this category with the amount of your enclosed check. Checks must be made payable to the **Kentucky State Treasurer. DO NOT SEND YOUR CHECK TO THE KENTUCKY STATE TREASURER - - IT MUST BE SUBMITTED WITH YOUR FORM.** To determine the appropriate fee to be submitted, refer to KRS 224.46-018.

- 3. MODIFICATION SERIAL NUMBER:** Upon using this form, for the first time, modification serial number "I" applies, and as future notifications must be made, they shall follow in proper numerical order.
- 6. ITEMIZED MODIFICATIONS:** Number and enter the affected permit condition or attachment. Please be as specific as possible (e.g., "Attachment V, Contingency Plan" or "Condition II.FA"). Clearly state the location of the modification in the permit (e.g., "Replace page G-2 in Attachment V"). List the date that the modification has been put into effect at the facility. Copies of all pages containing modifications should be attached to the application.
- 9. DESCRIPTION OF ITEMIZED MODIFICATION:** Comments on individual modifications may be made on the two pages provided. If more pages are needed for comments, the facility should use the enclosed pages to make additional copies. The "Item No." box corresponds to the "Item No." listed on the first page of the notification form. The facility's name, location, EPA identification number and modification serial number may be inserted on the proper lines.

**COMPLETED FORM:** The completed original in true and correct form shall be notarized and placed in the facility's permit directly behind the cover sheet, with the most recent form on top. Four notarized copies shall be mailed to the Cabinet with other appropriate materials.

Enclosure 6

Text Corrections or Clarifications  
to Permit Conditions

**Minor Clarifications to Hazardous Waste Facility Operating Permit KYS-890-008-982**

3. Permit Condition T-9, page 2 - Request correction of discrepancy between Attachment A (RCRA Part A) and this condition for neutralization, precipitation, oxidation, reduction, stabilization, or a combination thereof at the C-746-A Hazardous Waste Storage and Treatment Facility. The Attachment A (RCRA Part A) does not identify C-746-A as a facility for these activities. The phrase "the C-746-A Hazardous Waste Storage and Treatment Facility" should be removed from this condition.
4. Permit Condition T-14, page 3 - This Permit Condition is identical to Permit Condition T-12 on the same page. Request that T-14 be deleted and indicated as "Reserved."
5. Permit Condition T-30, page 6 - This Permit Condition relates to "Preparedness and Prevention;" however, it references Permit Application Attachment D, "Process Information." Request this reference be changed to Permit Application Attachment F, "Procedures to Prevent Hazards," which addresses requirements of 401 KAR 34:030 as indicated in the Permit Condition.
6. Permit Condition T-84, page 15 - Request correction of typographical error in reference to 401 KAR 38:050 Section 1(93); should be 401 KAR 38:005 Section 1(93).
7. Permit Condition T-133, page 23 - Request clarification of sampling events requiring advance notification to the Cabinet by adding "excluding waste characterization sampling unless specifically requested by the cabinet" to the end of the first sentence.
8. Permit Condition T-142, page 25 - Request correction of typographical error in the title, "Changes to the Permit," should be "Recordkeeping and Reporting" to be consistent with the text of this condition.
9. Permit Condition T-147, page 26 - Request correction of typographical error in reference to 401 KAR 35:060 Section 12; should be 401 KAR 34:060 Section 12.
10. Permit Condition T-4, page 48 - Request correction of discrepancy between Attachment A and this Condition for Sludge/Scale. Sludge/Scale at PGDP carries hazardous waste codes of D00X, F00X, and U00X. The U00X was omitted from the Permit Condition and should be added.
11. Permit Condition T-14, page 50 - Request revising "... maintain the storage area(s) and the containment..." to "...maintain the secondary containment system..." in order to provide clarification.
12. Permit Condition T-37, page 64 - Request that the date for the submittal of the annual groundwater flow rate and direction be changed from November 15 of each year to November 30 of each year to allow submittal with the semi-annual groundwater report required under Permit Condition T-47, page 66.
13. Permit Condition T-42, page 65 - Request clarification of the method(s) specified by removing "under Section 8(8) of this administrative regulation." The statistical methods in Attachment E, referenced in this condition, meet the requirements of 401 KAR 34:060 Section 8(8).
14. Permit Condition T-43, page 65 - Request removal of the second sentence in this condition, which states that the Branch Manager will specify the time period for determining a statistical significant increase in contamination. The second sentence is inconsistent with the third sentence, which specifies a time frame.



**PADUCAH REMEDIATION SERVICES, LLC**

004421

OUR REF. NO.	YOUR INVOICE NO.	INVOICE DATE	INVOICE AMOUNT	AMOUNT PAID	DISCOUNT TAKEN	NET CHECK AMOUNT
009844	091807	09/18/07	300.00	300.00	0.00	300.00
<p><i>AD 3059</i>  <i>Permit Modification</i>  <i>Ed Winner</i>  <i>Paducah Section</i></p>			<p><b>RECEIVED</b>                  2007 OCT -1 A 10: 58                  DIVISION OF WASTE MGMT                  HAZARDOUS WASTE BRANCH</p>			
			<p><i>KSR</i></p>			
TOTALS			300.00	300.00	0.00	300.00

004421

**PADUCAH**  
 Remediation Services  
 A Fumigis-Know Joint Venture Company  
 P.O. BOX 340  
 KEVIL, KY 42053

**USBANK**  
 92-372-1231

PAY  
 TO THE  
 ORDER OF

\*\*\*\*\*300 DOLLARS AND 00 CENTS\*\* 09/19/07 004421 \*\*\*\*\*300.00

KENTUCKY STATE TREASURER

*Chris M. Stew*


⑈004421⑈ ⑆123103729⑆ 153352558552⑈

**PADUCAH REMEDIATION SERVICES, LLC**

004421

OUR REF. NO.	YOUR INVOICE NO.	INVOICE DATE	INVOICE AMOUNT	AMOUNT PAID	DISCOUNT TAKEN	NET CHECK AMOUNT
009844	091807	09/18/07	300.00	300.00	0.00	300.00
<p><i>AD 3059</i>  <i>Permit Modification</i>  <i>Ed winner</i>  <i>Paducah Section</i></p>			<p><b>RECEIVED</b>  <b>2007 OCT -1 A 10:58</b>  <b>DIVISION OF WASTE MGMT</b>  <b>HAZARDOUS WASTE BRANCH</b></p> <p><i>KSR</i></p>			
			300.00	300.00	0.00	300.00
<b>TOTALS</b>						

004421

 **PADUCAH**  
Remediation Services  
A Fortage Shaw Joint Venture Company  
P.O. BOX 340  
KEVIL, KY 42053

**USBANK**  
92-372-1231

PAY TO THE ORDER OF

\*\*\*\*\*300 DOLLARS AND 00 CENTS\*\*

KENTUCKY STATE TREASURER

DATE: 09/19/07

CONTROL NO.: 004421

AMOUNT: \*\*\*\*\*300.00

*Chris M. Stew*

⑈004421⑈ ⑆123103729⑆ 153352558552⑈

Details on back  
Security Features Included.

Item Number	Permit Conditions as of Modification #1	Permit Conditions as of Modification #2	Changes Made
1	T-1, PART I pg 1 of 69	T-1, PART I pg 1 of 70	Conditon chaged to add "(herein referred to as the Cabinet)" after "... Kentucky Environmental and Public Protection Cabinet" in the first sentence.
2	T-3, PART I pg 1 of 69	T-3, PART I pg 1 of 70	Condition changed to reword a portion of the first sentence to to read as follows: "...the permit renewal application ..."
3	T-4, PART I pg 1 of 69	T-4, PART I pg 1 of 70	Condition changed to reword a portion of the first sentence to read as follows: "The renewal permit was issued on September 30, 2004 (effective October 31, 2004)..."
4	T-6, PART II pg 2 of 69	T-6, PART II pg 2 of 70	Condition changed to reword a portion of the last sentence to read as follows: "... storage tanks (in C-733) and in containers as defined in 401 KAR 31:005."
5	T-7, PART II pg 2 of 69	T-7, PART II pg 2 of 70	Condition changed to reword a portion of the first sentence to read as follows: "The following is a summary of the hazardous waste management storage and treatment facilities the ..."
6	T-8, PART II pg 2 of 69	T-8, PART II pg 2 of 70	Condition changed to delete the second sentence.
7	T-9, PART II pg 2 of 69	T-9, PART II pg 2 of 70	Condition changed to reword a portion of the first sentence to remove "... the C-746-A Hazardous Waste Storage and Treatment Facility." According to the most recently submitted Part A application (dated January 3, 2007 and submitted on January 9, 2007), the types of treatment specified in this conditon (excluding those associated with the bulb crushers) are not permitted in the C-746-A Facility.
8	T-9, PART II pg 2 of 69	T-9, PART II pg 2 of 70	Condition changed to add the following citations: 34:180 and 34:190.
9	T-14, PART II pg 3 of 69	T-14, PART II pg 3 of 70	This conditon is a repeat of T-12. { Note: This condition will be left as is for this modification, in order to not cause a shift in the condition numbers. This condition will be removed once the permit is converted out of TEMPO. }
10	T-25, PART II pg 5 of 69	T-25, PART II pg 5 of 70	Condition changed to reword a portion of the last sentence to read as follows: "...the training required by the above condition."
11	T-25, PART II pg 6 of 69	T-25, PART II pg 5 of 70	Condition changed to add the following citation: 34:020 Section 7.
12	T-27, PART II pg 5 of 69	T-27, PART II pg 5 of 70	Condition changed to add "(Attachment G)" after the first use of "Contingency Plan" and to remove the sentence that begins with "Contingency Plan."

13	T-29, PART II pg 6 of 69	T-29, PART II pg 6 of 70	Condition changed to add the following language from the cited regulation in order to provide definition for this condition: "For the permitted units the Permittee shall comply with the following: Whenever waste is being poured, mixed, spread, or otherwise handled, all personnell involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless the Cabinet has ruled that such a device is not required under 401 KAR 34:030 Section 3. If there is ever just one (1) employee on the premises while the facility is operating, the employee must have immediate access to a device such as a telephone (immediately availalbe at the scene of operation) or a hand-held two (2) way radio, capable of summoning external emergency assistance, unless the Cabinet has ruled that such a device is not required under 401 KAR 34:030 Section 3."
14	T-30, PART II pg 6 of 69	T-30, PART II pg 6 of 70	Condition changed to revise reference to Attachment D to Attachment F and remove the phrase, "that is incorporated into this permit."
15	T-30, PART II pg 6 of 69	T-30, PART II pg 6 of 70	Condition changed to add a space between "emergencyequipment," to change "purposessuch" to "purpose and such" and to remove the word "equipment" in the second sentence just before the phrase "unless it can be demonstrated."
16	T-46 PART II pg 9 of 69	T-47 PART II pg 9 of 70	Condition changed to reword "30 day" to "30-day"
17	T-48 PART II pg 10 of 69	T-49 PART II pg 10 of 70	Condition changed to reword a portion of the first sentence to read as follows: "...to the date expected for closure activities to begin, as set forth.."
18	T-53 PART II pg 11 of 69	T-54 PART II pg 11 of 70	Condition changed to reword "postclosure" to "post-closure".
19	T-55 PART II pg 11 of 69	T-56 PART II pg 11 o 70	Condition changed to reword "postclosure" or "Postclosure" to "post-closure" or "Post-closure" in three places.
20	T-55 PART II pg 11 of 69	T-55 PART II pg 11 of 70	Condition changed to reword "postclosure" or "Postclosure" to "post-closure" or "Post-closure" in two places.
21	T-56 PART II pg 11 o 69	T-57 PART II pg 11 o 70	Condition changed to reword "postclosure" or "Postclosure" to "post-closure" or "Post-closure" in four places.
22	T-62 PART II pg 12 of 69	T-63 PART II pg 12 of 70	Condition changed to reword "postclosure" to "post-closure".
23	T-63 PART II pg 12 of 69	T-64 PART II pg 12 of 70	Condition changed to reword "Postclosure" to "Post-closure".
24	T-65 PART III pg 13 of 69	T-66 PART III pg 13 of 70	Condition changed to spell out the acronym CQA (Construction Quality Assurance) and to hyphenate "noncompliance" in the last sentence.
25	T-75 PART III pg 14 of 69	T-76 PART III pg 15 of 70	Condition changed to capitilize "amendment." TEMPO required a "General Rule" to be added. Selected 30:010 Section 1.
26	T-84 PART III pg 15 of 69	T-85 PART III pg 16 of 70	Condition changed to revise citation from "38:050" to "38:005".

27	T-87 PART III pg 16 of 69	T-88 PART III pg 16 of 70	Condition changed to revised citation from "38:005 Section 116" to "38:005 Section 1(116)".
28	T-91 PART III pg 16 of 69	T-92 PART III pg 17 of 70	Condition changed to revised citation "38:050" to "38:005".
29	T-93 PART III pg 17 o 69	T-94 PART III pg 17 o 70	Condition changed to add the following citation: 401 KAR 38:005 Section 1(187).
30	T-94 PART III pg 17 of 69	T-95 PART III pg 17 of 70	Condition changed to remove captilization from "Site" in the last sentence. TEMPO required a "General Rule" to be added. Selected 30:010 Section 1.
31	T-96 PART III pg 17 of 69	T-97 PART III pg 18 of 70	Conditin changed to reword "Post Construction" to "Post-Construction" in the first sentence. TEMPO required a "General Rule" to be added. Selected 30:010 Section 1.
32	T-109 PART III pg 19 of 69	T-110 PART III pg 20 of 70	Condition changed to add the following citation: 401 KAR 38:005 Section 1(250).
33	T-112 PART III pg 19 of 69	T-113 PART III pg 20 of 70	Condition changed to revise "SWMU's" to "SWMUs" in two places.
34	T-112 PART III pg 19 of 69	T-112 PART III pg 20 of 70	Condition changed to add the following citation: 401 KAR 38:005 Section 1 (255).
35	T-124 PART III pg 22 of 69	T-125 PART III pg 22 of 70	Condition changed to capitilize "permittee" in the second sentence.
36	T-132 PART III pg 23 of 69	T-133 PART III pg 24 of 70	Condition changed to reword a portion of the last sentence to read as follows: "...notified the Permittee of their intention not to inspect."
37	T-133 PART III pg 23 of 69	T-134 PART III pg 24 of 70	Condition changed to add "(excluding waste characterization sampling unless specifically requested by the Cabinet)" at the end of the first sentence.
38	T-135 PART III pg 24 of 69	T-136 PART III pg 24 of 70	Condition changed to reword "noncompliance" to "non-compliance" in the first sentence.
39	T-142 PART III pg 25 of 69	T-42 PART III pg 9 of 70	Condition changed reword "independent registered professional engineer" to "independent professional engineer registered in Kentucky" in the first sentence.
40	T-142 PART III pg 25 of 69	T-42 PART III pg 9 of 70	Condition changed to move to Part II - Specific Conditions - Recordkeeping and Reporting.
41	T-147 PART IV pg 26 of 69	T-147 PART IV pg 27 of 70	Condition changed to revise "five year" to "five-year".
42	T-147 PART IV pg 26 of 69	T-147 PART IV pg 27 of 70	Condition changed to revise "35:060" to "34:060".
43	T-166 PART IV pg 32 of 69	T-166 PART IV pg 33 of 70	Condition changed to revise "SARS" to "SARs". Also, "(if warranted)" has been added after the revised "SARs" to allow for situations when the SARs have already been submitted.
44	T-192 PART IV pg 37 of 69	T-192 PART IV pg 38 of 70	Condition changed to revise "Post Construction" to "Post-Construction" in two places. TEMPO required a "General Rule" to be added. Selected 34:060 Section 12.

45	T-199 PART IV pg 38 of 69	T-199 PART IV pg 39 of 70	Condition changed to add the following sentences: As warranted, additional copies may be requested by the Cabinet. Less than four copies may be submitted for select documents upon approval from the Hazardous Waste Branch Manger.
46	T-211 PART VI pg 41 of 69	T-211 PART VI pg 42 of 70	Condition changed to remove capitalization from "Storage" in the first sentence.
47	T-224 PART VII pg 43 of 69	T-224 PART VII pg 44 of 70	Condition changed to reword a portion of the last sentence to read as follows: "...corrected within 24 hours."
48	T-231 PART VIII pg 44 of 69	T-231 PART VIII pg 45 of 70	Condition changed to reword and restructure "Facility Waste Characteristics and Waste Analysis Plan" to "Waste Analysis Plan and facility waste characteristics".
49	T-238 PART VIII pg 45 of 69	T-238 PART VIII pg 46 of 70	Condition changed to reword a portion of the sentence to read as follows: "...and is incorporated..."
50	T-4 PART II pg 48 of 69	T-4 PART II pg 49 of 70	Condition changed to add add U00X to Sludges/scale. TEMPO required a "General Rule" to be added. Selected 34:180.
51	T-10, 11 & 12 PART II pg 50 of 69	T-10, 11 & 12 PART II pg 51 of 70	Condition changed to omit "and the following" in T-11 through T-12.
52	T-14 PART II pg 50 of 69	T-14 PART II pg 51 of 70	Condition changed to reword a portion of the first sentence to read as follows: "The Permittee shall maintain the secondary containment system free of cracks and gaps and ensure that the containment system is..."
53	T-17 PART II pg 51 of 69	T-17 PART II pg 52 of 70	Condition changed to add a space between "woodenpallets."
54	T-24 PART II pg 53 of 69	T-24 PART III pg 54 of 70	Condition changed to reword a portion of the last waste description to read as follows: "...Contingency Plan (Attachment G)"
55	T-1 PART II pg 58 of 69	T-1 PART II pg 59 of 70	Condition changed to remove the entire sentence that starts with "As of the effective date.." since this is no longer true. Also, removed "Therefore," in the following sentence, capitilized "the" and changed "has been placed" to "is".
56	T-5 PART II pg 59 of 69	T-5 PART II pg 60 of 70	Condition changed to revised reference from Section 9 to Section 6.
57	T-29 PART II pg 62 of 69	T-29 PART II pg 63 of 70	Condition revised to remove reference to purgable organic halogens.
58	T-37 PART II pg 64 of 69	T-37 PART II pg 65 of 70	Condition changed revise submittal date to November 30.
59	T-37 PART II pg 64 of 69	T-37 PART II pg 65 of 70	Condition changed to revise "Post-closure" to "post-closure".

60	T-39 PART II pg 64 of 69	T-39 PART II pg 65 of 70	Condition changed to reword the last sentence to read as follows: "The compliance period began with the initial groundwater monitoring event on October 11, 1988 and will end on October 11, 2028 (unless the C-404 Hazardous Waste Landfill has moved into a Corrective Action Program under 401 KAR 34:060 Section 11).
61	T-42 PART II pg 65 of 69	T-42 PART II pg 65 of 70	Note: This condition was not changed. This issue should be reevaluated in Modification #3.
62	T 43 PART II pg 65 of 69	T 43 PART II pg 65 of 70	Condition changed to remove second sentence which is inconsisten with the third sentence.
63	T-48 PART II pg 66 of 69	T-48 PART II pg 67 of 70	Condition changed to add the word "a" before "form."
64	T-54 PART II pg 67 of 69	T-54 PART II pg 68 of 70	Condition changed to revise "whall" to "shall".
65	T-56 PART II pg 68 of 69	T-56 PART II pg 69 of 70	Condition changed to reference Section 9.
66	T-57 PART II pg 68 of 69	T-57 PART II pg 69 of 70	Omit incomplete sentence starting with "If the Permittee..." This is a repeat from T-55.

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AAZZ1 (Entire facility) Entire facility.:

### Narrative Requirements:

#### PART I - Legal Authority:

Condition No.	Condition
T-1	PART I - Legal Authority: Pursuant to the Kentucky Environmental Protection Law, as amended (KRS Chapter 224) and attendant regulations promulgated thereunder by the Kentucky Environmental and Public Protection Cabinet (herein referred to as the Cabinet), in the Kentucky Administrative Regulations title 401, a permit is issued to the United States Department of Energy and Paducah Remediation Services, L.L.C. at 5600 Hobbs Road, West Paducah, Kentucky, for treatment, storage, corrective action and closure and post-closure care of hazardous waste, at latitude 37°6'41.95" and longitude 88°48'46.09" (KY8-890-008-982). [KRS 224.46-530(1)(g)]
T-2	PART I - Legal Authority: The Permittee shall comply with all terms and conditions of this permit. This permit consists of the conditions set forth in Part II (Specific Conditions), Part III (Standard Conditions), Part IV (Corrective Action), Part V (Waste Minimization), Part VI (Land Disposal Restrictions), Part VII (RCRA Organic Air Emissions Standards for Process Vents and Equipment Leaks), Part VIII (Referenced Attachments), and the applicable waste management regulations. Applicable regulations are those which are in effect on the date of issuance and also prior to the modification, revocation, or reissuance of this permit. Based on the following regulation(s) effective 03/12/1997: [KRS 224.46-530(1)(g), 401 KAR 38:030 Section 3]
T-3	PART I - Legal Authority: This permit is based on the assumption that the information in the permit renewal application submitted on February 21, 2001, and subsequently revised on February 25, 2002, and April 13, 2004 is accurate and that the facility will be operated as specified in the renewal application and this permit. Any inaccuracies found in this information could lead to the termination or modification of this permit and potential enforcement. The Permittee shall inform the Cabinet of any deviation from, or changes in the information in the application, which would affect the Permittee's ability to comply with the applicable regulations or permit conditions. Based on the following regulation(s) effective 03/12/1997: [401 KAR 40:040 Section 1, 401 KAR 38:030 Section 1, 401 KAR 38:040 Section 4]
T-4	PART I - Legal Authority: The renewal permit was issued on September 30, 2004 (effective October 31, 2004) and shall remain in effect for a duration of ten years until the specified expiration, unless revoked and reissued, or terminated. Based on the following regulation(s) effective 03/12/1997: [401 KAR 38:040 Section 2 and 4, 401 KAR 38:050 Section 2, 401 KAR 40:050 Section 1]
T-5	PART I - Legal Authority: A reference to "Manager" means Manager, Hazardous Waste Branch within the Division of Waste Management. A reference to "Director" means Director, Division of Waste Management, Department for Environmental Protection, Environmental and Public Protection Cabinet. The terms "Cabinet, Department, and Division" can be used interchangeably. Based on the following regulation(s) effective 03/12/1997: [KRS 224.46-530(1)(g)]

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**AZZ1 (continued):**

### Narrative Requirements:

#### **PART II - Specific Conditions - Facility Description:**

Condition No.	Condition
T-6	PART II - Specific Conditions - Facility Description: This permit is issued to the Department of Energy and Paducah Remediation Services, L.L.C. (hereinafter referred to as the "Permittee") for treatment, storage, closure and post-closure care of hazardous waste; and corrective action at 5600 Hobbs Road, West Paducah, Kentucky. Storage takes place in four (4) storage tanks (in C-733) and in containers as defined in 401 KAR 31:005. [401 KAR 34:010 Section 1]
T-7	<p>PART II - Specific Conditions - Facility Description: The following is a summary of the hazardous waste management storage and treatment facilities the Permittee is permitted to operate at the facility:</p> <p>C-733 Hazardous Waste Storage and Treatment Facility</p> <p>C-746-Q Hazardous Waste Storage and Treatment Facility</p> <p>C-752-A Hazardous Waste Storage and Treatment Facility</p> <p>C-746-A Hazardous Waste Storage and Treatment Facility. [KRS 224.46-530(1)(g)]</p>
T-8	PART II - Specific Conditions - Facility Description: The hazardous wastes which may be treated and stored at this facility are listed in Attachment C-1. Each of these hazardous wastes shall be managed as specified within this permit. [KRS 224.46-530(1)(g)]
T-9	PART II - Specific Conditions - Facility Description: The Permittee may treat hazardous waste by neutralization, precipitation, oxidation, reduction, stabilization or a combination thereof at the C-752-A Hazardous Waste Storage and Treatment Facility, and the C-746-Q Hazardous Waste Storage and Treatment Facility in accordance with the requirements listed in this paragraph, and the procedures outlined in Attachment D - "Process Information" which is incorporated as part of this permit. [401 KAR 34:180, 401 KAR 34:190]
T-10	PART II - Specific Conditions - Facility Description: The Permittee may treat hazardous waste by absorption and decanting at the C-752-A Hazardous Waste Storage and Treatment Facility, the C-733 Hazardous Waste Storage and Treatment Facility, the C-746-A Hazardous Waste Storage and Treatment Facility, and the C-746-Q Hazardous Waste Storage and Treatment Facility, in accordance with the requirements listed in this paragraph, and the procedures outlined in Attachment D - "Process Information" which is incorporated as part of this permit.
T-11	PART II - Specific Conditions - Facility Description: The Permittee may treat hazardous waste by compaction at the C-752-A Hazardous Waste Storage and Treatment Facility, the C-733 Hazardous Waste Storage and Treatment Facility, the C-746-A Hazardous Waste Storage and Treatment Facility, and the C-746-Q Hazardous Waste Storage and Treatment Facility in accordance with the requirements listed in this paragraph, and the procedures outlined in Attachment D - "Process Information" which is incorporated as part of this permit.

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**AZZ1 (continued):**

### Narrative Requirements:

#### **PART II - Specific Conditions - Facility Description:**

Condition No.	Condition
T-12	PART II - Specific Conditions - Facility Description: The Permittee may treat hazardous debris by macroencapsulation at the C-752-A Hazardous Waste Storage and Treatment Facility in accordance with the requirements listed in this paragraph, and the procedures outlined in Attachment D - "Process Information", which is incorporated as part of this permit. Upon approval of a treatment plan by the Hazardous Waste Branch Manager, the Permittee may treat hazardous waste at the C-752-A Hazardous Waste Storage and Treatment Facility by macroencapsulation, or may treat hazardous debris or hazardous wastes by macroencapsulation at the C-733 Hazardous Waste Storage and Treatment Facility, C-746-Q Hazardous Waste Storage and Treatment Facility, or C-746-A Hazardous Waste Storage and Treatment Facility.
T-13	PART II - Specific Conditions - Facility Description: The Permittee may treat fluorescent/miscellaneous lamps (mercury D009, lead D008, cadmium D006, and chromium D007) for volume reduction. Treatment may take place in the C-746-Q and C-746-A Hazardous Waste Storage and Treatment Facility in accordance with Attachment D - "Process Information" which is incorporated as part of this permit.
T-14	PART II - Specific Conditions - Facility Description: The Permittee may treat hazardous debris by macroencapsulation at the C-752-A Hazardous Waste Storage and Treatment Facility in accordance with the requirements listed in this paragraph, and the procedures outlined in Attachment D - "Process Information", which is incorporated as part of this permit. Upon approval of a treatment plan by the Hazardous Waste Branch Manager, the Permittee may treat hazardous waste at the C-752-A Hazardous Waste Storage and Treatment Facility by macroencapsulation, or may treat hazardous debris or hazardous wastes by macroencapsulation at the C-733 Hazardous Waste Storage and Treatment Facility, C-746-Q Hazardous Waste Storage and Treatment Facility, or C-746-A Hazardous Waste Storage and Treatment Facility.

#### **PART II - Specific Conditions - General Facility Standards:**

Condition No.	Condition
T-15	PART II - Specific Conditions - General Facility Standards: The Permittee shall not accept any hazardous waste generated from off-site, except for: 1) waste generated as a result of environmental restoration/management activities (e.g. corrective action, removal action, remedial action, investigations, and/or monitoring) that are associated with releases or potential releases from the PGDP; or 2) residuals generated from the treatment or analysis of PGDP waste.
T-16	PART II - Specific Conditions - General Facility Standards: The Permittee shall be responsible for all wastes, including USEC-generated wastes, that are stored in the storage areas listed in this permit. In the event of a release or other emergency, the Permittee will be responsible for ensuring that the proper response is taken pursuant to Part II Specific Conditions - Contingency Plan and Emergency Response.

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IAZZI (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - General Facility Standards:

Condition No.	Condition
T-17	PART II - Specific Conditions - General Facility Standards: The Permittee shall comply with all requirements set forth under the regulation(s) specified in this paragraph, and the Attachment C, "Waste Analysis Plan" that is incorporated into this permit. In accordance with the following regulation(s) effective on 03/12/1997: [401 KAR 34:020 Section 4]
T-18	PART II - Specific Conditions - General Facility Standards: The Permittee shall comply with all requirements set forth under the regulation(s) specified in this paragraph, and the Attachment F - "Procedures to Prevent Hazards" that is incorporated into this permit. The Permittee shall also: (a) Maintain security, which monitors and controls entry to the facility twenty-four (24) hours a day. Other forms of security include road barriers that restrict site entry on off shifts and weekends. (b) Maintain the gates and fences around the hazardous waste facility in good operating condition at all times. (c) Maintain signs at the entrance to the facility and other locations that are legible from twenty-five (25) feet from any direction and read: DANGER-Unauthorized Personnel-Keep Out." Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:020 Section 5]
T-19	PART II - Specific Conditions - General Facility Standards: The Permittee shall comply with all requirements set forth under the regulation(s) specified in this paragraph and 401 KAR Chapter 34 as applicable. The Permittee shall remedy any deterioration or malfunction discovered by an inspection in accordance with applicable regulation(s) and the Attachment F - "Procedures to Prevent Hazards", that is incorporated into this permit. The Permittee shall conduct the inspections in accordance with the Inspection Schedule included in Attachment F that is incorporated into this permit. Records of inspection shall be kept as required by the regulation(s) specified in this paragraph, and in addition to the above referenced Inspection Schedule, the Permittee shall record all inspections in the inspection log format included in applicable attachment(s) to this permit. At a minimum, the Permittee shall inspect the following components of the tank system once each day tank system is in operation: a) Above ground portions of the tank system to detect corrosion or releases of waste, b) Data gathered from monitoring and leak detection equipment to ensure that the tank system is being operated according to its design, and c) Construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system, to detect erosion or signs of releases of hazardous waste (e.g. wet spots, dead vegetation, etc.). Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:020 Section 6, 401 KAR 34:180 Section 5, 401 KAR 34:190 Section 6]
T-20	PART II - Specific Conditions - General Facility Standards: The Permittee shall conduct personnel training as required by the regulation(s) specified in this paragraph, and procedures outlined in Attachment H - "Personnel Training", that is incorporated into this permit. Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:020 Section 7]
T-21	PART II - Specific Conditions - General Facility Standards: The Permittee shall maintain training documents and records as required by the regulation(s) specified in this paragraph. Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:020 Section 7(4), 401 KAR 34:020 Section 7(5)]

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AAZZ1 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - General Facility Standards:

Condition No.	Condition
T-22	PART II - Specific Conditions - General Facility Standards: All employees involved in hazardous waste management at the facility shall be given appropriate training and this training shall be repeated/reviewed annually, as specified in the regulation(s) (effective 3-12-97). If training takes place during a particular month, the next year the facility has until the end of the month or 30 days after the annual date of the previous training occurred to complete the training. [401 KAR 34:020 Section 7(3)]
T-23	PART II - Specific Conditions - General Facility Standards: The Permittee shall prepare and maintain detailed job descriptions with all information required by the specified regulation(s) in this paragraph, for all personnel involved in the hazardous waste treatment and storage facility operations. Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:020 Section 7(4)]
T-24	PART II - Specific Conditions - General Facility Standards: The Permittee shall utilize the procedure under the incorporated Attachment C - "Waste Analysis Plan" and Attachment D - "Process Information" to ensure that ignitable, reactive or incompatible wastes are not managed improperly, and to determine ignitability, reactivity, and compatibility of waste. The Permittee must prevent accidental ignition or reaction of incompatible and/or reactive wastes. The Permittee shall not place hazardous waste in an unwashed tank or container which previously held incompatible wastes or material. [KRS 224.46-530(1)(g), 401 KAR 34:020 Section 8, 401 KAR 34:180 Section 7 and 8, 401 KAR 34:190 Section 9 and 10]
T-25	PART II - Specific Conditions - General Facility Standards: All new employees hired in the positions that involve hazardous waste management (handling, storing, or shipping hazardous wastes) at the facility shall successfully complete the training required by the above condition within six (6) months of their employment, and must not work in unsupervised positions until they have completed the training required by the above condition. [401 KAR 34:020 Section 7]

#### PART II - Specific Conditions - Preparedness and Prevention:

Condition No.	Condition
T-26	PART II - Specific Conditions - Preparedness and Prevention: The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion or unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water, which could threaten human health or environment. Based on the following regulation(s) effective on 02/04/1986: [401 KAR 34:030 Section 2]
T-27	PART II - Specific Conditions - Preparedness and Prevention: The Permittee shall comply with all requirements set forth under the specified regulation(s) and the following: a) At a minimum, the Permittee shall keep all equipment at the facility as specified in the Contingency Plan (Attachment G). b) The Permittee shall maintain all emergency equipment at the locations listed in the Contingency Plan. Based on the following regulation(s) effective on 02/04/1986: [401 KAR 34:030 Section 3]

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AAZZ1 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Preparedness and Prevention:

Condition No.	Condition
T-28	PART II - Specific Conditions - Preparedness and Prevention: The Permittee shall comply with all requirements set forth under the specified regulation(s) and the following: In order to ensure proper operation in time of emergency, the Permittee shall test all equipment at the facility and maintain all equipment at the facility in good working order in accordance with the specified regulation(s) in this paragraph and the inspection schedule given in Attachment F - "Procedures to Prevent Hazards" that is incorporated into this permit. Based on the following regulation(s) effective on 02/04/86: [401 KAR 34:030 Section 4]
T-29	PART II - Specific Conditions - Preparedness and Prevention: For the permitted units the Permittee shall comply with the following: Whenever waste is being poured, mixed, spread, or otherwise handled, all personnell involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless the Cabinet has ruled that such a device is not required under 401 KAR 34:030 Section 3. If there is ever just one (1) employee on the premises while the facility is operating, the employee must have immediate access to a device such as a telephone (immediately available at the scene of operation) or a hand-held two (2) way radio, capable of summoning external emergency assistance, unless the Cabinet has ruled that such a device is not required under 401 KAR 34:030 Section 3. In accordance with the following regulation(s) effective on 02/04/1986: [401 KAR 34:030 Section 5]
T-30	PART II - Specific Conditions - Preparedness and Prevention: The Permittee shall comply with all requirements set forth under the regulation(s) specified in this paragraph, and Attachment F - "Procedures to Prevent Hazards." The Permittee shall maintain sufficient aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control emergency equipment and decontamination equipment to any area of facility operation in an emergency, unless it can be demonstrated to the Cabinet that aisle space is not needed for any of these purposes and such movement is not needed to respond to an emergency. In accordance with the following regulation(s) effective on 02/04/1986: [401 KAR 34:030 Section 6]
T-31	PART II - Specific Conditions - Preparedness and Prevention: The Permittee shall comply with all requirements set forth under the regulation(s) specified in this paragraph, and the following: The Permittee shall make the appropriate arrangements with local hospitals, fire and police departments, and other appropriate agencies for emergency response service by sending copies of the Contingency Plan to these agencies within one week of issuance of this permit. The Permittee shall document in the operating record any refusal by any of the agencies to enter into such arrangements. In accordance with the following regulation(s) effective on 02/04/1986: [401 KAR 34:030 Section 7]

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HAZZ1 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Contingency Plan and Emergency Response:

Condition No.	Condition
T-32	PART II - Specific Conditions - Contingency Plan and Emergency Response: The Permittee shall comply with all requirements set forth under the regulation(s) specified in this paragraph. The Permittee shall immediately carry out the provisions of the Contingency Plan, (Attachment G) and follow the emergency procedures described in the specified regulation(s), whenever there is an imminent or actual emergency situation including a fire, explosion, or unplanned sudden or non-sudden release of any hazardous waste or hazardous waste constituents from the facility. The Permittee must note in the operating record the time, date, and details of any incident that requires implementing the Contingency Plan. The Permittee must comply with notification procedures set forth in the specified regulation(s), and as outlined in the facility's Contingency Plan (Attachment G). Based on the following regulation(s) effective on 02/04/1986: [401 KAR 34:040 Section 7, 401 KAR 34:040 Section 2 and 3]
T-33	PART II - Specific Conditions - Contingency Plan and Emergency Response: The Permittee shall comply with all requirements set forth under the regulation(s) specified in this paragraph, and in accordance with procedures specified in Attachment G - "Contingency Plan" that is incorporated into this permit. Current copies of the Contingency Plan shall be maintained at the facility and at all emergency response departments (i.e. fire, police, and hospital) that may provide emergency services. Based on the following regulation(s) effective on 02/04/1986: [401 KAR 34:040 Section 4]
T-34	PART II - Specific Conditions - Contingency Plan and Emergency Response: The Permittee shall review and amend the incorporated Contingency Plan to this permit as required by the regulation(s) specified in this paragraph. The Permittee shall address the requirements on a routine basis by conducting an annual audit of the Contingency Plan and making appropriate modifications, including changes to the lists of emergency coordinators and/or equipment. Upon approval of the amended Contingency Plan, the Permittee shall provide copies to the local authorities that were previously specified in Part II - Specific Conditions - Preparedness and Prevention. [401 KAR 34:040 Section 5]
T-35	PART II - Specific Conditions - Contingency Plan and Emergency Response: The Permittee shall comply with all requirements set forth under the regulation(s) specified in this paragraph, concerning the facility Emergency Coordinator(s). An Emergency Coordinator shall be on-site or on call at all times. In accordance with the following regulation(s) effective 02/04/1986: [401 KAR 34:040 Section 6]

#### PART II - Specific Conditions - Manifest System:

Condition No.	Condition
T-36	PART II - Specific Conditions - Manifest System: The Permittee shall comply with the manifest requirements of 401 KAR 34:050, Section 2. A copy of the manifest shall be kept at the facility for at least three (3) years from the date of delivery of the waste. [401 KAR 34:050 Section 2]

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AZZ1 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Manifest System:

Condition No.	Condition
T-37	PART II - Specific Conditions - Manifest System: Pursuant to 401 KAR 30:020, Section 2(1)(a), the Permittee is granted a variance from the requirements of 401 KAR 32:010, Section 1(7) for USEC-generated waste. The Cabinet finds that the procedure by which USEC-generated waste is shipped off-site from the storage areas listed in this permit, and manifested by USEC to a commercial recycling, treatment, and/or disposal facility provides adequate protection of human health and safety. Because of the method of operation, the variance from 401 KAR 32:010, Section 1(7) is insignificant as a potential hazard to public health or the environment. [401 KAR 30:020 Section 2(1)(a)]
T-38	PART II - Specific Conditions - Manifest System: For any manifest discrepancies that can not be resolved with the generator or transporter within 15 days of the receipt of the waste, a manifest discrepancy report will be prepared and submitted to the Cabinet in accordance with the specified regulation(s) in this paragraph. If a discrepancy report is deemed necessary as required by the regulation(s) in this paragraph or the incorporated Waste Analysis Plan (Attachment C), the Permittee shall submit such report and reject the waste on the 16th day of the receipt of the waste. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:050 Section 2, 401 KAR 34:050 Section 3, 401 KAR 34:050 Section 7]
T-39	PART II - Specific Conditions - Manifest System: The Permittee shall not accept any hazardous waste at this facility, except as provided in this permit. [401 KAR 34:050]

#### PART II - Specific Conditions - Recordkeeping and Reporting:

Condition No.	Condition
T-40	PART II - Specific Conditions - Recordkeeping and Reporting: The Permittee shall comply with all requirements set forth under the regulation(s) specified in this paragraph concerning the record keeping procedures. The Permittee shall maintain records of each hazardous waste stored at the facility. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:050 Section 4]
T-41	PART II - Specific Conditions - Recordkeeping and Reporting: The Permittee shall comply with all requirements set forth under the regulation(s) specified in this paragraph concerning the Availability, Retention, and Disposition of Records. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:050 Section 5]

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AZZ1 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Recordkeeping and Reporting:

Condition No.	Condition
Γ-42	PART II - Specific Conditions - Recordkeeping and Reporting: The Permittee shall maintain at the facility, until closure is completed and certified by an independent professional engineer registered in Kentucky, the following documents and amendments, revisions, and modifications to these documents: a) Operating record as required by the regulation(s) specified in this permit condition; b) Personnel training documents and records as required by the regulation(s) specified in this permit condition; c) Inspection schedule (including the schedules in the "Procedures to Prevent Hazards", Attachment F in this permit) as required by 401 KAR 34:040, Section 4; d) Use of manifest system as required by 401 KAR 34:050, Section 2; e) Manifest Discrepancy Reports as required by 401 KAR 34:050, Section 6; f) Copy of the Contingency Plan (including the "Contingency Plan", Attachment G incorporated into this permit), as required by 401 KAR 34:040, Section 4; g) Tank management documents as required by 401 KAR 34:190. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:050 Section 4, 401 KAR 34:020 Section 7, 401 KAR 34:040 Section 4, 401 KAR 34:180, 401 KAR 34:190, 401 KAR 34:020 Section 6]
Γ-43	PART II - Specific Conditions - Recordkeeping and Reporting: The Permittee shall comply with all requirements set forth under the regulation(s) specified in this paragraph concerning any additional reports that may have to be submitted to the Cabinet. Additional activities for which reporting is required shall include releases, fires, explosions, and facility closures. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:050 Section 8]
Γ-44	PART II - Specific Conditions - Recordkeeping and Reporting: The Permittee shall comply with all requirements set forth under the regulation(s) specified in this paragraph. The Permittee shall provide annual reports: Due annually, by the 1st of March on the form designated by the Cabinet. If requested by the Cabinet, the Permittee shall provide an electronic transfer of Annual Report data. The Annual Report shall include the following information at a minimum: a) EPA identification number, name, and address of facility; b) Calendar year covered by the report; c) Description and quantity of all wastes received during the year; d) Method of treatment, storage, or disposal of each waste; e) Information regarding transportation and the manifest, as applicable; f) Description of changes in volume and toxicity achieved during the year; g) Efforts taken to reduce the volume and toxicity of the waste generated; and h) Signed certification: Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:050 Section 6]
Γ-45	PART II - Specific Conditions - Recordkeeping and Reporting: The Hazardous Waste Assessment Return form is due on January 1, annually. The Permittee shall be allowed to submit the completed return on or before March 1 without penalty or interest. The Division shall calculate penalties and interest for returns submitted after March 1 based on the statutory January 1 due date. [KRS 224.46-580]
Γ-46	PART II - Specific Conditions - Recordkeeping and Reporting: The Permittee shall report to the Division within 24 hours of the detection, when a release or spill occurs from any of the regulated units to the environment. A release of one pound or less of hazardous waste, that is immediately contained and cleaned up, need not be reported. If the Permittee has reported the release pursuant to KRS 224.01-400, that report satisfies the requirements of this condition. [KRS 224.01-400]



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**AZZ1 (continued):**

### Narrative Requirements:

#### **PART II - Specific Conditions - Recordkeeping and Reporting:**

Condition No.	Condition
T-47	PART II - Specific Conditions - Recordkeeping and Reporting: The Permittee shall submit a report to the Division within 30 days of detecting a release to the environment from a regulated unit. The report shall contain the following information: Precise location of the release, specific pollutant or contaminant or hazardous substance released, concentration and quantity of the pollutant or contaminant or hazardous substance in the release, circumstances and cause of the release, likely route of migration of the release, characteristics of the surrounding environment (including soil composition, geology, hydrogeology, and climate), results of any monitoring or sampling conducted in connection with the release, description of response action taken or planned; and the name, address, and telephone number of the person who can be contacted for additional information concerning the release. If the Permittee finds it will be impossible to meet this time period, the Permittee should provide the Hazardous Waste Branch Manager with a schedule of when the results will be available. This schedule must be provided before the required 30-day submittal period expires. Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:050 Section 8]

#### **PART II - Specific Conditions - Closure:**

Condition No.	Condition
T-48	PART II - Specific Conditions - Closure: The Permittee shall comply with all requirements of the specified regulation(s) in this condition for the following permitted units: C-733, C-752-A, C-746-A, and C-746-Q (hereinafter "permitted units"), and close the permitted units as pursuant to the procedures outlined in the incorporated "Closure Plan", Attachment I in this Permit. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:070]
T-49	PART II - Specific Conditions - Closure: The Permittee shall notify the Hazardous Waste Branch Manager at least 45 days prior to the date expected for closure activities to begin, as set forth under the specified regulation(s) in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:070 Section 3(4)(a)]
T-50	PART II - Specific Conditions - Closure: The Permittee shall amend the "Closure Plan" whenever necessary in accordance with the specified regulation(s) in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:070 Section 2, 401 KAR 34:070 Section 3]
T-51	PART II - Specific Conditions - Closure: The Permittee shall comply with the specified regulation(s) in this condition. Within ninety (90) days after receiving the final volume of hazardous waste in the permitted unit(s), the Permittee must remove all hazardous wastes in the permitted unit(s) in accordance with the incorporated "Closure Plan", Attachment I of this permit. All closure activities shall be completed as described in the attached "Closure Plan" within 180 days after receiving the final volume of waste, unless a longer period is approved by the Branch Manager. Further, all equipment and the facility will be decontaminated and washing residues removed. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:070 Section 4]

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#### PART II - Specific Conditions - Closure:

Condition No.	Condition
T-52	PART II - Specific Conditions - Closure: The Permittee shall decontaminate and/or dispose of all contaminated equipment, structures, and soils at the permitted unit(s) as required by the specified regulation(s) in this condition, and the procedures outlined in the incorporated "Closure Plan", Attachment I of this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:070 Section 5]
T-53	PART II - Specific Conditions - Closure: Within sixty (60) days of completion of closure of each of the permitted unit(s), the Permittee shall submit to the Hazardous Waste Branch Manager, by registered mail, a certification that closure for the hazardous waste storage unit was performed in accordance with the specification in the incorporated "Closure Plan", Attachment I of this permit. The certification shall be signed by the owner or operator and by an independent professional engineer registered in the Commonwealth of Kentucky. Documentation supporting the independent registered professional engineer's certification shall be furnished to the Branch Manager upon request in accordance with the specified regulation(s) in this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:070 Section 6]

#### PART II - Specific Conditions - Postclosure Requirements:

Condition No.	Condition
T-54	PART II - Specific Conditions - Postclosure Requirements: The Permittee shall provide post-closure care for C-404 Hazardous Waste Landfill, subject to the terms and conditions of this permit, and as described as follows: Based on the following regulations effective on 3/12/97: [401 KAR 34:070 Section 8]
T-55	PART II - Specific Conditions - Postclosure Requirements: Within sixty (60) days of completion of the established post-closure care period for the C-404 Hazardous Waste Landfill, the Permittee must submit to the Hazardous Waste Branch Manager, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specification in the incorporated "Post-closure Plan" - Attachment I of this permit. The certification must be signed by the owner or operator and by an independent professional engineer registered in the Commonwealth of Kentucky. Documentation supporting the independent registered professional engineer's certification must be furnished to the Branch Manager upon request in accordance with the specified regulation(s) in this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:070 Section 11]
T-56	PART II - Specific Conditions - Postclosure Requirements: The Permittee shall perform the post-closure monitoring and maintenance for a minimum of thirty years in accordance with the requirements specified in the post-closure plan. Based on the following regulations effective on 3/12/97: [401 KAR 34:070 Section 8]

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### Narrative Requirements:

#### PART II - Specific Conditions - Postclosure Requirements:

Condition No.	Condition
T-57	PART II - Specific Conditions - Postclosure Requirements: The Permittee shall implement the Post-closure Plan, - Attachment I of this permit. All post-closure care activities must be conducted in accordance with the provisions of the Post-closure Plan. The Permittee shall request any necessary permit modification and amend the Post-closure Plan in accordance with the provisions of the applicable regulations. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:070 Section 9]
T-58	PART II - Specific Conditions - Postclosure Requirements: The Permittee shall comply with the applicable requirements for landfills. At final closure of the landfill or upon closure of any cell, the Permittee shall cover the landfill or cell with a final cover designed and constructed to: provide long-term minimization of migration of liquids through the closed landfill; function with minimum maintenance; promote drainage and minimize erosion or abrasion of the cover; accommodate settling and subsidence so that the cover's integrity is maintained; and have a permeability less than or equal to $1 \times 10^{-7}$ centimeters per second. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:230 Section 6]
T-59	PART II - Specific Conditions - Postclosure Requirements: The Permittee shall maintain and monitor the groundwater monitoring system as applicable, and comply with all other applicable requirements during the post-closure period as set forth in the specified regulation(s). Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:070 Section 8]
T-60	PART II - Specific Conditions - Postclosure Requirements: The Permittee shall maintain the integrity and effectiveness of the final cover, including making repairs to the cap, as necessary to correct the effects of settling, subsidence, erosion, or other events. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:230 Section 6]
T-61	PART II - Specific Conditions - Postclosure Requirements: The Permittee shall continue to operate the leachate collection and removal system, if and when necessary, until leachate is no longer detected. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:230 Section 6]
T-62	PART II - Specific Conditions - Postclosure Requirements: The Permittee shall prevent run-on and run-off from eroding or otherwise damaging the final cover. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:230 Section 6]
T-63	PART II - Specific Conditions - Postclosure Requirements: The Permittee shall not allow any post-closure use of property on or in which hazardous wastes remain after partial or final closure that disturbs the integrity of the final cover, liner(s), any other components of the containment system, or the function of the facility's monitoring systems, unless the Cabinet finds that the disturbance : (a) Is necessary to the proposed use of the property, and will not increase the potential hazard to human health and the environment; or (b) Is necessary to reduce a threat to human health or the environment. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:070 Section 8(3)]

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### Narrative Requirements:

#### PART II - Specific Conditions - Postclosure Requirements:

Condition No.	Condition
T-64	PART II - Specific Conditions - Postclosure Requirements: The Permittee shall comply with the general inspection requirements as specified by this paragraph. The Permittee shall inspect the landfill in accordance with the Inspection Schedule provided in the "Post-closure Plan", which is incorporated as Attachment I to this permit. The Permittee shall remedy any deterioration or malfunction discovered by an inspection. Records of inspection shall be kept as specified by the regulation(s) in this condition. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:020 Section 6, 401 KAR 34:230 Section 6]
T-65	PART II - Specific Conditions - Postclosure Requirements: The Permittee shall obtain a permit modification in accordance with 401 KAR 38:040, Section 3, for any additional post-closure care equipment not listed in this permit. Based on the following regulation(s) effective on 3/12/97: [401 KAR 38:040 Section 3]

#### PART III - Standard Conditions - Effect of the Permit:

Condition No.	Condition
T-66	PART III - Standard Conditions - Effect of the Permit: Compliance with the terms of this permit constitutes compliance for purposes of enforcement with KRS 224 (implementing Subtitle C of the Resource Conservation and Recovery Act) except for those requirements not included in the permit which: a) Become effective by statute; b) Are promulgated under 401 KAR Chapter 37 restricting the placement of hazardous wastes in or on the land; c) Are promulgated under 401 KAR Chapter 34 regarding leak detection systems for new and replacement surface impoundments, waste pile, and landfill units, and lateral expansions of surface impoundments, waste pile, and landfill units. The leak detection system requirements include double liners, Construction Quality Assurance (CQA) programs, monitoring, action leakage rates and response action plans, and shall be implemented through the procedures of Chapter 38; or d) Are promulgated under 401 KAR 35:275, 35:280, or 35:281. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege. The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local laws or administrative regulations. In the event of non-compliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health and the environment. Based on the following regulation(s) effective 03/12/1997: [401 KAR 38:010 Section 3, 401 KAR 38:030 Section 1]

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#### PART III - Standard Conditions - Permit Actions:

Condition No.	Condition
T-67	PART III - Standard Conditions - Permit Actions: This permit may be modified, revoked and reissued, or terminated for causes pursuant to the specified regulations in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:040 Section 1,2,3,4, 401 KAR 38:050 Section 2, 401 KAR 38:070 Section 1]
T-68	PART III - Standard Conditions - Permit Actions: This permit may be modified, revoked and reissued, or terminated for causes pursuant to the specified regulations in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(1), 401 KAR 38:030 Section 1(6), 401 KAR 38:030 Section 1(12)(c)]
T-69	PART III - Standard Conditions - Permit Actions: This permit may be modified, revoked and reissued, or terminated for causes pursuant to the specified regulation(s) in this condition. Based on the following regulation(s) effective 12/02/1983: [401 KAR 40:040 Section 1]
T-70	PART III - Standard Conditions - Permit Actions: The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated non-compliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(6)]

#### PART III - Standard Conditions - Severability:

Condition No.	Condition
T-71	PART III - Standard Conditions - Severability: The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. Based on the following regulation(s) effective 05/08/1990: [401 KAR 30:020 Section 5]

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HAZZ1 (continued):

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#### PART III - Standard Conditions - Definitions:

Condition No.	Condition
T-72	PART III - Standard Conditions - Definitions: For the purpose of this permit, terms used herein shall have the same meaning as those in Title 401 of Kentucky Administrative Regulations, Chapters 30, 34, and 38, unless this permit specifically provides otherwise. Where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. Based on the following regulation(s) effective 3/12/1997: [401 KAR 30:010 Section 1]
T-73	PART III - Standard Conditions - Definitions: "Annual Removal Action Plan" for the purpose of this permit shall mean the plan that describes the removal actions performed during the previous fiscal year. This plan shall meet the IM reporting provisions of Part IV of this permit.
T-74	PART III - Standard Conditions - Definitions: "Action Memorandum" for the purpose of this permit shall mean the decision document for time-critical and non time-critical removal actions describing the selected response action.
T-75	PART III - Standard Conditions - Definitions: "Area of Concern" (AOC) for purposes of this permit includes any area having evidence of a release of a hazardous waste or hazardous constituent, which is not from a Solid Waste Management Unit and poses a current or potential threat to human health or the environment. Such Areas of Concern may require investigations and remedial action as required under KRS 224.46-530(1)(g) and 401 KAR 38:030, Section 3 (effective 3-12-97) in order to ensure adequate protection of human health and the environment. [KRS 224.46-530(1)(g)]
T-76	PART III - Standard Conditions - Definitions: "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§9601, et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. L. 99-499. [401 KAR 30:010 Section 1]
T-77	PART III - Standard Conditions - Definitions: "Contamination" for purposes of this permit means the degradation of naturally occurring water, air, or soil quality either directly or indirectly as a result of human activities. [KRS 224.46-530(1)(g)]
T-78	PART III - Standard Conditions - Definitions: "Corrective action," for purposes of this permit, may include all corrective measures necessary to protect human health and the environment from all releases of hazardous waste or hazardous waste constituents from any solid waste management unit or area of concern at the facility, regardless of the time at which waste was placed in the unit, as required under KRS 224.46-530, and the specified regulation(s) in this condition. Based on the following regulation(s) effective 3/12/1997: [KRS 224.46-530(1)(g), 401 KAR 34:060 Section 11, 401 KAR 34:060 Section 12]
T-79	PART III - Standard Conditions - Definitions: "Corrective Measures Implementation" (CMI) for the purposes of this permit shall mean the design, construction, operation, maintenance, and monitoring of selected corrective measures. The CMI shall meet the requirements of RCRA, the corrective action requirements of KRS 224 - Chapter 46, their implementing regulations, and this Permit. Corrective Measures Implementation may be achieved through the schedules and specific actions contained in a Record of Decision, as appended to this permit, or the schedules in Appendix D to Part IV - "Schedule of Compliance". [KRS 224.46]

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### Narrative Requirements:

#### PART III - Standard Conditions - Definitions:

Condition No.	Condition
T-80	PART III - Standard Conditions - Definitions: "Corrective Measures Study" (CMS) for purposes of this permit shall mean the study or report identifying and recommending, as appropriate, specific corrective measures that will correct the release(s) identified during the RCRA Facility Investigation. For the purposes of this permit, a Feasibility Study shall be equivalent to a CMS.
T-81	PART III - Standard Conditions - Definitions: "Days" for purposes of this permit shall mean calendar days, unless business days are specified. Any submittal or written statement of dispute that under the terms of this Permit would be due on a Saturday, Sunday, or holiday shall be due on the following business day.
T-82	PART III - Standard Conditions - Definitions: "DOE" shall mean the United States Department of Energy and it authorized representatives.
T-83	PART III - Standard Conditions - Definitions: "Engineering Evaluation/Cost Analysis" (EE/CA) for purposes of this permit shall mean the document which evaluates removal alternatives for non-time critical removal actions.
T-84	PART III - Standard Conditions - Definitions: "Extent of contamination" for purposes of this permit is defined as the horizontal and vertical area in which the concentrations of hazardous waste constituents in the environmental media being investigated are above detection limits or background concentrations indicative of the region, whichever is appropriate as determined by the Manager. [KRS 224.46-530(1)(g)]
T-85	PART III - Standard Conditions - Definitions: "Facility" for the purposes of this permit means: a) all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (for example, one or more landfills, surface impoundments, or combinations of them); and b) For the purpose of implementing corrective action under Section 12 of 401 KAR 34:060, all contiguous property under the control of the owner or operator seeking a hazardous waste permit. This definition also applies to facilities implementing corrective action under KRS 224.46-520. [KRS 224.46-520(1)(g), 401 KAR 38:005 Section 1(93)]
T-86	PART III - Standard Conditions - Definitions: "Feasibility Study" (FS) for purposes of this permit shall mean a study to develop and evaluate options for remedial action. The FS emphasizes data analysis and is generally performed concurrently and in an interactive fashion with the remedial investigation (RI), using the data gathered during the RI. The RI data are used to define the objectives of the response action, to develop remedial action alternatives, and to undertake an initial screening and detailed analysis of the alternatives. The term also refers to the report that describes the results of the study.
T-87	PART III - Standard Conditions - Definitions: "Final Remedial Action Report" for purposes of this permit shall mean the report describing the remedy for an Operable Unit. The report shall be submitted after the Operations and Maintenance Period and include a Certification that the remedy is operational and functional. The Final Remedial Action Report is an element of Corrective Measures Implementation as outlined under Part IV - Corrective Action - Work Plan and Report Requirements of this permit.

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#### PART III - Standard Conditions - Definitions:

Condition No.	Condition
T-88	PART III - Standard Conditions - Definitions: "Hazardous constituent" for purposes of this permit means constituents which shall conform to the requirements of the Resource Conservation and Recovery Act (RCRA), as amended and includes the constituents listed in 401 KAR 31:170. Based on the following regulation(s) effective 3/12/1997: [KRS 224.01-010(42), 401 KAR 38:005(116)]. [401 KAR 38:005 Section 1(116), KRS 224.01-010(42)]
T-89	PART III - Standard Conditions - Definitions: "Hazardous waste constituent" for purposes of this permit means a constituent which caused the Cabinet to list the hazardous waste in 401 KAR 31:040, or a constituent listed in Section 5(3) of 401 KAR 31:030. Based on the following regulation(s) effective 3/12/1997: [KRS 224.46-530(1)(g), KRS 224.01-010(42), 401 KAR 38:005(119)]. [KRS 224.46-530(1)(g), 401 KAR 31:170]
T-90	PART III - Standard Conditions - Definitions: "Interim Measures" (IM) for the purposes of this permit are actions necessary to contain, remove, mitigate, or treat contamination resulting from the release of hazardous waste constituents from SWMUs in order to protect against current or potential threats to human health and the environment. For the purposes of this permit, Interim Remedial Actions or Removal Actions shall be equivalent to Interim Measures. [KRS 224.46-530(1)(g)]
T-91	PART III - Standard Conditions - Definitions: "Land Disposal" for purposes of this permit includes but is not limited to any placement of hazardous waste in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, or underground mine or cave. [KRS 224.46-530(1)(g), KRS 224.01-010(43)]
T-92	PART III - Standard Conditions - Definitions: "Landfill" for the purposes of this permit includes any disposal facility or part of a facility where hazardous waste is placed in or on the land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit. [KRS 224.46-530(1)(g), 401 KAR 38:005 Section 1(157)]
T-93	PART III - Standard Conditions - Definitions: "Manager" shall mean Manager of the Hazardous Waste Branch.
T-94	PART III - Standard Conditions - Definitions: "On-Site" for the purposes of this permit means on the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a crossroads intersection, and access is by crossing, as opposed to going along the right-of-way. Noncontiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access is also considered on-site property. [401 KAR 38:005 Section 1(187)]



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#### PART III - Standard Conditions - Definitions:

Condition No.	Condition
T-95	PART III - Standard Conditions - Definitions: "Operable Unit" (OU) for purposes of this permit shall mean a discrete action that comprises an incremental step toward comprehensively addressing site problems. This discrete portion of a remedial response manages migration; or eliminates or mitigates a release, threat of release, or pathway of exposure. The cleanup of the site can be divided into a number of OUs, depending on the complexity of the problems associated with the site. OUs may address geographic portions of the site, specific site problems, or initial phases of an action, or may consist of any set of actions performed over time or any actions that are concurrent but located in different parts of the site. A Comprehensive Site (CS) OU is an OU which integrates the information obtained from Potential OU RI/FS activities regarding environmental media (i.e. Surface Water OU, Surface Soils OU, Groundwater OU, and Burial Grounds OU) which has been contaminated by comingled source releases. OUs will not impede implementation of subsequent response actions at the site. [401 KAR 30:010 Section 1]
T-96	PART III - Standard Conditions - Definitions: "Operation and Maintenance (O&M) Plan" for purposes of this permit shall mean the plan describing the measures required to maintain the effectiveness of response actions.
T-97	PART III - Standard Conditions - Definitions: "Post-Construction Report" for purposes of this permit shall mean the report submitted upon completion of the construction phase of a Response Action. The Report shall describe the construction work completed and certification that the construction work has been completed. [401 KAR 30:010 Section 1]
T-98	PART III - Standard Conditions - Definitions: "Proposed Plan" for purposes of this permit shall be the report which briefly describes the remedial alternatives analyzed, proposes a preferred remedial action alternative, and summarizes the information relied upon to select the preferred alternative. The Proposed Plan, upon approval by the Cabinet, shall serve as a statement of basis for a draft permit modification to incorporate a remedy into this permit.
T-99	PART III - Standard Conditions - Definitions: "RCRA Facility Investigation" (RFI) shall mean an investigation performed in accordance with this permit to gather data sufficient to adequately characterize the nature, extent, and rate of migration of actual and potential hazardous waste constituent releases. Those SWMUs and AOCs requiring RFIs are identified in Appendix A of this Permit. For the purposes of this permit, a Remedial Investigation shall be equivalent to a RFI.
T-100	PART III - Standard Conditions - Definitions: "Regulated units" means hazardous waste land disposal sites or facilities, or portions of existing hazardous waste land disposal sites or facilities, that continued to receive waste after January 26, 1983. [KRS 224.46-530(1)(g), 401 KAR 34:005 Section 1(234), 401 KAR 34:060 Section 1]
T-101	PART III - Standard Conditions - Definitions: A "Release" for purposes of this permit includes any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any hazardous waste or hazardous waste constituents. [KRS 224.46-530(1)(g)]

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#### PART III - Standard Conditions - Definitions:

Condition No.	Condition
T-102	PART III - Standard Conditions - Definitions: "Remedial Action" (RA) shall mean the implementation of the RA Work Plan, in accordance with the ROD, the approved Remedial Design (RD), the NCP and Superfund Remedial Design and RA Guidance including on-site construction, treatment processes, and any other necessary tasks and shall be consistent with 42 U.S.C. Section §§ 9601 (24). For purposes of this permit the RA shall be equivalent to the CMI.
T-103	PART III - Standard Conditions - Definitions: "Remedial Action Work Plan" (RAWP) for purposes of this permit shall mean the plan describing the implementation of the RA selected for remediation of an OU.
T-104	PART III - Standard Conditions - Definitions: "Remedial Design (RD) Report" for purposes of this permit shall mean the report which specifies the technical analysis and procedures which follow the selection of a remedy and result in a detailed set of plans and specifications for final design of the RA. In accordance with the approved RD Work Plan, Intermediate RD Reports and a Final RD Report shall be submitted for review and comment in accordance with Section XX (Review/Comment on Draft/Final Document) of the FFA. The design shall generally be developed in phases (e.g., 30%, 60%, 90%, etc.) with Intermediate RD Reports for each primary design development/review phase.
T-105	PART III - Standard Conditions - Definitions: "Remedial Design (RD) Work Plan" for purposes of this permit shall mean the plan specifying the approach to developing the RD. This plan shall specify general content, approach, and schedule for submitting the secondary Intermediate RD Report(s) and the D1 RD Report. Generally, the RD Work Plan shall include the conceptual design.
T-106	PART III - Standard Conditions - Definitions: "Remedial Investigation" (RI) for purposes of this permit shall mean an investigation conducted to adequately assess the nature and extent of the release or threat of release of hazardous substances, pollutants or contaminants, or hazardous wastes and hazardous waste constituents; and to gather necessary data to support the corresponding baseline risk assessment and FS and shall be consistent with 40 CFR 300. 5. For purposes of this permit, the RI shall be equivalent to the RFI.
T-107	PART III - Standard Conditions - Definitions: "Removal Action" shall have the same meaning as "remove" or "removal" as defined by Section 101 (23) of CERCLA, 42 U.S.C. §§ 9601 (23). For the permit, Removal Action shall be equivalent to IM. "Non-time Critical Removal Actions" are those actions for which a planning period of six (6) months or greater is required. All other removal actions shall be defined either as time-critical or emergency actions.
T-108	PART III - Standard Conditions - Definitions: "Removal Action Work Plan" for purposes of this permit shall mean the plan that provides a concise description of the activities to be undertaken to comply with the requirements of the FFA and shall meet the IM Work Plan requirements outlined in Part IV of this permit. The removal work plan shall also contain, but not be limited to, the following: 1) a health safety plan; 2) a detailed design report (or schedule for submitting a detailed design report); and 3) a schedule for the completion of the work to be performed.

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#### PART III - Standard Conditions - Definitions:

Condition No.	Condition
T-109	PART III - Standard Conditions - Definitions: "Record of Decision" (ROD) for purposes of this permit shall mean the document issued which describes a remedial action plan for an operable unit pursuant to Section 117(b) of CERCLA, 42 U.S.C. §§ 9617 and shall be consistent with 40 CFR 300.430(f)(5). The Cabinet shall issue a permit modification to incorporate a remedy upon concurrence with the Record of Decision.
T-110	PART III - Standard Conditions - Definitions: "Site" for the purposes of this permit shall mean the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the waste facility or activity. [401 KAR 38:005 Section 1(250)]
T-111	PART III - Standard Conditions - Definitions: "Site Evaluation Report" for purposes of this permit shall mean the report submitted subsequent to CERCLA response site evaluations and if it includes the information required in a SWMU Assessment Report and Confirmatory Sampling Report may be considered an equivalent document to a SWMU Assessment Report and Confirmatory Sampling Report.
T-112	PART III - Standard Conditions - Definitions: The term "solid waste" for purposes of this permit means any garbage, refuse, sludge, and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining (excluding coal mining wastes, coal mining by-products, refuse and overburden), agricultural operations, and from community activities, but does not include those materials including, but not limited to, sand, soil, rock, gravel, or bridge debris extracted as part of a public road construction project funded wholly or in part with state funds, recovered material, special wastes as designated by KRS 224.50-760, solid or dissolved material in domestic sewage, manure, crops, crop residue, or a combination thereof which are placed on the soil for return to the soil as fertilizers or soil conditioners, or solid or dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits Section 402 of the Federal Water Pollution Control Act as amended (86 Stat. 880), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923). [KRS 224.46-530(1)(g)]
T-113	PART III - Standard Conditions - Definitions: A "Solid Waste Management Unit" (SWMU) for the purposes of this permit includes any discernable unit which has been used for the treatment, storage, or disposal of solid waste or hazardous waste at any time, irrespective of whether the unit is or ever was intended for the management of solid waste or hazardous waste. RCRA regulated hazardous waste management units are also SWMUs. SWMUs include areas that have been contaminated by routine and systematic releases of hazardous waste or hazardous constituents, excluding one-time accidental spills that are immediately remediated and cannot be linked to waste management activities (e.g., product or product spills). Passive leakage from chemical storage tanks and production processes is also excluded from the definition unless the leakage is routine or systematic. [40 CFR 260.-530(1)(g), 401 KAR 38:005 Section 1(255)]
T-114	PART III - Standard Conditions - Definitions: A "Unit" for the purpose of this permit includes, but is not limited to any area in which waste has been placed on or in the ground, any landfill, surface impoundment, waste pile, land treatment unit, incinerator, injection well, tank, container storage area, septic tank, drain field, wastewater treatment unit, elementary neutralization unit, transfer facility, or recycling unit. [KRS 224.46-530(1)(g)]

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#### PART III - Standard Conditions - Definitions:

Condition No.	Condition
T-115	PART III - Standard Conditions - Definitions: "Waste Area Grouping" (WAG) for purposes of this permit shall mean a group of SWMUs or AOCs that are geographically contiguous, hydrologic units, or SWMUs/AOCs that exhibit other common characteristics (e.g. contaminant type, remedial alternatives, etc.). DOE may consolidate SWMUs, WAGs, and/or other areas into single groupings for purposes of conducting any work under this permit and with the concurrence of the Manager.

#### PART III - Standard Conditions - Duties and Requirements:

Condition No.	Condition
T-116	PART III - Standard Conditions - Duties and Requirements: The Permittee shall comply with all conditions of this permit except to the extent and for the duration that such non-compliance is authorized by an emergency permit. Any permit non-compliance constitutes a violation of KRS Chapter 224 and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application pursuant to the specified regulation(s) in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(1)]
T-117	PART III - Standard Conditions - Duties and Requirements: At least 180 days before this permit expires, the Permittee shall submit a complete application for a new permit if the Permittee wishes to continue any activity allowed under this permit pursuant to the regulation(s) specified in this condition. The Permittee shall apply for a new permit in accordance with the regulations in effect 180 days prior to the expiration of this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(2), 401 KAR 38:040, 401 KAR 38:050, 401 KAR 38:070]
T-118	PART III - Standard Conditions - Duties and Requirements: This Permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application and through no fault of the Permittee, the Cabinet has not issued a new permit as pursuant to the specified regulation(s) in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:040 Section 6(1)]
T-119	PART III - Standard Conditions - Duties and Requirements: It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(3)]
T-120	PART III - Standard Conditions - Duties and Requirements: The Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent any significant adverse impacts on the environment resulting from non-compliance with this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(4)]

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#### PART III - Standard Conditions - Duties and Requirements:

Condition No.	Condition
T-121	PART III - Standard Conditions - Duties and Requirements: The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(5)]
T-122	PART III - Standard Conditions - Duties and Requirements: The Permittee shall furnish the Cabinet, within a reasonable time, any information requested to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish the Cabinet with copies of the records kept as a requirement of this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(8)]
T-123	PART III - Standard Conditions - Duties and Requirements: Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the Cabinet or an authorized representative: a) To enter at reasonable times the Permittee's premises where the regulated facility or activity is located or conducted; or where records must be kept under the conditions of this permit; b) To have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; c) To inspect, at reasonable times, any facility's equipment, (including monitoring and control equipment), practices, or operations regulated or required under this permit; and d) To sample or monitor, at reasonable times, any substances or parameters at any location for the purposes of assuring permit compliance or as otherwise authorized by KRS Chapter 224. Split samples and copies of analysis will be provided to the Permittee upon request. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(9)]
T-124	PART III - Standard Conditions - Duties and Requirements: Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain representative samples of the wastes to be analyzed must be the appropriate method from 401 KAR 31:120. Laboratory methods shall be those specified in the most recent edition of Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846) or a method approved by the Cabinet in accordance with the specified regulation(s) in this condition. All environmental monitoring data collected pursuant to Parts II and IV of this permit shall be submitted to the Division, both in written and electronic format. Sampling data shall be submitted in accordance with the schedules described in this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 31:060 Section 6, 401 KAR 31:120, 401 KAR 30:010 Section 3]
T-125	PART III - Standard Conditions - Duties and Requirements: The Permittee shall retain records of all monitoring information, copies of all reports required by this permit, and records of all data used to complete the application for this permit for a period of at least three (3) years from the date of the sample, measurement, report, certification or application. In addition, the Permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1, 401 KAR 38:070 Section 6, 401 KAR 34:050 Section 5]

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#### PART III - Standard Conditions - Duties and Requirements:

Condition No.	Condition
T-126	PART III - Standard Conditions - Duties and Requirements: The retention period for all records required under this permit is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the Cabinet. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:050 Section 5]
T-127	PART III - Standard Conditions - Duties and Requirements: Records of monitoring information shall include: a) The date, exact place, and time of sampling or measurements; b) The individual(s), third-party laboratory or testing service that performed the sampling or measurements; c) The date(s) analyses were performed; d) The individual(s), third-party laboratory or testing service that performed the analyses; e) The analytical techniques or methods used; and f) The results of such analyses including the detection limits. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(10)]
T-128	<p>PART III - Standard Conditions - Duties and Requirements: The Permittee shall give notice to the Hazardous Waste Branch Manager as soon as possible of any planned physical alterations or additions to the facility that could affect Solid Waste Management Units or Areas of Concern at the facility. Notice shall not be required for the following activities:</p> <ul style="list-style-type: none"><li>a) Planned activities that do not have the potential to increase contamination or mobilize site contamination beyond the unit boundary (including, but not limited to, general maintenance activities inside and outside buildings, and installation of signs or fence posts.</li><li>b) Planned activities that would not impede the Permittee from complying with the Corrective Action Provisions of this permit.</li><li>c) Planned activities that do not involve modification to the approved construction designs for an existing treatment, storage, and disposal (TSD) unit.</li><li>d) SWMUs that have been designated No Further Action, as shown in Appendix A to this Permit.</li><li>e) Planned activities which are part of an emergency response operation.</li><li>f) Releases at existing SWMUs derived from normal operation of the plant that are in compliance with the applicable permits or other relevant regulatory requirements.</li></ul> <p>Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(12)(a)]</p>
T-129	PART III - Standard Conditions - Duties and Requirements: The Permittee shall give to the Hazardous Waste Branch Manager advance notice of any planned change in the permitted facility or activity that may result in non-compliance with permit requirements. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(12)(b)]
T-130	PART III - Standard Conditions - Duties and Requirements: This Permit may be transferred to a new owner or operator only if it is modified or revoked pursuant to the specified regulation(s) in this condition, in order to identify the new Permittee and incorporate such other requirements as may be necessary under KRS Chapter 224. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 401 KAR Chapters 38 and 34 and this permit. This permit is not transferable to any person except after notice to the Director. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:040 Section 2(2)(b), 401 KAR 38:050 Section 2, 401 KAR 38:040 Section 3, 401 KAR 34:020 Section 3(3)]

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#### PART III - Standard Conditions - Duties and Requirements:

Condition No.	Condition
T-131	PART III - Standard Conditions - Duties and Requirements: Prior to the transfer of ownership or operation of the facility, the Permittee shall notify the new owner/operator in writing of the requirements of 401 KAR Chapters 38 and 34 and this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:020 Section 3(3), 401 KAR 38:030 Section 1(12)(c), 401 KAR 38:040 Section 1]
T-132	PART III - Standard Conditions - Duties and Requirements: Reports of compliance or non-compliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each scheduled date as required by the specified regulation(s) in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(12)(c)]
T-133	PART III - Standard Conditions - Duties and Requirements: The Permittee shall not begin treatment or storage of hazardous wastes in any new or proposed hazardous waste management unit, until the Permittee has complied with the following: a) The Permittee has submitted to the Director by certified mail or hand delivery a letter signed by the Permittee and a professional engineer registered in the Commonwealth of Kentucky stating that the hazardous waste management unit(s) has(have) been constructed in accordance with this permit and/or its modification(s), and b) The Permittee has received confirmation that the appropriate Cabinet personnel has inspected the newly constructed building and tanks and has determined that the newly constructed units are in compliance with the conditions of this permit; or c) The Permittee has received confirmation that the Cabinet has either waived the inspection, or has within fifteen (15) days, notified the Permittee of their intention not to inspect. [KRS 224.46-530(1)(g), 401 KAR 38:030 Section 1(12)]
T-134	PART III - Standard Conditions - Duties and Requirements: The Permittee shall, at a minimum, provide one week advance notification to the appropriate Cabinet field personnel or Hazardous Waste Branch Staff for any sampling event required by this permit or its effects (excluding waste characterization sampling, unless specifically requested by the Cabinet). Notification may be submitted in writing or in an electronic format. Electronic mail shall be submitted to pgdp.notify@ky.gov.  [KRS 224.46-530(1)(g)]
T-135	PART III - Standard Conditions - Duties and Requirements: The Permittee shall report to the Hazardous Waste Branch Manager any non-compliance with the permit, which may endanger human health or the environment. Any information shall be provided orally within two (2) hours from the time the Permittee becomes aware of the circumstances (Kentucky twenty-four (24) hours reporting number (502) 564-7815). The following information must be reported orally within two (2) hours: a) Information concerning release of any hazardous wastes or hazardous waste constituents that may cause an endangerment to public drinking water supplies; and b) Any information of a release or discharge of hazardous waste constituents or of a fire or explosion at the permitted facility that could threaten human health or the environment outside the facility. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(12)(f)]

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#### PART III - Standard Conditions - Duties and Requirements:

Condition No.	Condition
T-136	PART III - Standard Conditions - Duties and Requirements: The Permittee shall also provide a written submission to the Branch Manager within five (5) days of the time the Permittee becomes aware of the non-compliance specified in the condition immediately above. The written submission shall contain a description of the non-compliance and its cause; the periods of non-compliance (including exact dates and times); whether the non-compliance has been corrected; and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and steps planned or taken to reduce, eliminate, and prevent reoccurrence of the non-compliance. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(12)(f)]
T-137	PART III - Standard Conditions - Duties and Requirements: The Permittee shall report all instances of non-compliance not reported above, at the time annual reports are submitted. New discoveries of hazardous wastes may be reported in this manner, when the Permittee can establish that no potential for the release of hazardous wastes or hazardous constituents was posed due to the past management of the hazardous wastes. The reports shall contain a description of the non-compliance and its cause; the periods of non-compliance (including exact dates and times); whether the non-compliance has been corrected; and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and steps planned or taken to reduce, eliminate, and prevent reoccurrence of the non-compliance. The report shall also include quantities of waste(s) discovered, all applicable hazardous waste codes, and a statement that no potential for the release of hazardous wastes or hazardous constituents was posed due to past management of the hazardous wastes. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:030 Section 1(12)(g)]
T-138	PART III - Standard Conditions - Duties and Requirements: This permit may be modified pursuant to the regulation(s) specified in this condition. The Cabinet shall modify the permit pursuant to 401 KAR 38:040 to incorporate the Corrective Action Plans and Records of Decision. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:040, 401 KAR 34:060 Section 12]
T-139	PART III - Standard Conditions - Duties and Requirements: If the Permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Cabinet, such facts or information shall be submitted (or corrected) promptly. In addition, upon request, the Permittee shall furnish to the Cabinet any information related to compliance with the permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:070 Section 7, 401 KAR 38:030 Section 1(12)(i)]
T-140	PART III - Standard Conditions - Duties and Requirements: All reports or information required by this permit, or otherwise submitted to the Cabinet, shall be signed and certified by a principal executive officer, or ranking elected official or responsible corporate officer or by a duly authorized representative of that person as referenced and defined in the specified regulation(s) in this condition. Certifications shall include the language required under the regulations specified in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 38:070 Section 7, 401 KAR 38:030 Section 1(11)]



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#### PART III - Standard Conditions - Duties and Requirements:

Condition No.	Condition
T-141	PART III - Standard Conditions - Duties and Requirements: The Permittee shall submit a revised Part A application if the Part A information changes in conjunction with any request for modification of this Permit. In addition, a revised Part A shall be submitted to the Cabinet ninety (90) days prior to change in the ownership or operational control of the facility, and the Part A shall be signed and certified by the new owner or operator. [401 KAR 38:040 Section 2(4)]. [401 KAR 38:040 Section 2(4)]

#### PART III - Standard Conditions - Changes to the Permit:

Condition No.	Condition
T-142	PART III - Standard Conditions - Changes to the Permit: Pursuant to 401 KAR 38:040 Section 2 and 3, the Division may modify the permit upon promulgation of statutory or regulatory changes whose purpose is the protection of health and welfare of the citizens of the Commonwealth or their environment. Based on the following regulation(s) effective 03/12/1997: [401 KAR 38:040 Section 2, 401 KAR 38:010 Section 3]

#### PART III - Standard Conditions - Confidential Information:

Condition No.	Condition
T-143	PART III - Standard Conditions - Confidential Information: The Permittee may claim confidential any information required to be submitted by this permit in accordance with procedures and the specified regulation(s) in this condition. Based on the following regulation(s) effective 3/12/1997 and 05/14/1987, respectively: [401 KAR 38:070 Section 8, 400 KAR 1:060]

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#### PART IV - Corrective Action - Applicability:

Condition No.	Condition
T-144	PART IV - Corrective Action - Applicability: PART IV - Corrective Action - Applicability: The Cabinet, DOE and EPA, Region 4 have indicated an intention in the Federal Facility Agreement for the Paducah Gaseous Diffusion Plant to coordinate DOE's CERCLA response obligations with the corrective measures required in Part IV of this permit and Kentucky's hazardous waste statutes and regulations. (Appendix G- Referenced sections of the FFA is hereby incorporated into the permit). In order to facilitate consistency between the interim dates in the FFA schedules of compliance and the interim compliance dates in Part IV - Appendix D of this permit, the Hazardous Waste Branch Manager will issue modifications to the Part IV - Appendix D of this permit coincident with the Cabinet's approval of annual revisions to the Paducah Gaseous Diffusion Plant - Site Management Plan in accordance with 401 KAR 38:040, Section 3. Modifications to Part IV - Appendix D of this permit that establish or revise a final cleanup date for the facility will proceed in accordance with 401 KAR 38:040, Section 2. Based on the following regulation(s): [401 KAR 34:060 Section 12, 401 KAR 38:040]. [401 KAR 34:060 Section 12, 401 KAR 38:040]
T-145	PART IV - Corrective Action - Applicability: A list of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) requiring a RCRA Facility Investigation (RFI) at this facility is provided in Appendix A-1 of this permit. Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:060 Section 12]
T-146	PART IV - Corrective Action - Applicability: A list of Solid Waste Management Units (SWMUs), which require no further action under this permit at this time is provided in Appendix A-2 of this permit. The SWMUs which are identified as "treatment, storage, or disposal units" are listed in Appendix A-3 of this permit. SWMUs for which the Permittee has submitted SWMU Assessment Reports, and are under review by the Cabinet, are identified in Appendix A-4(b) of this permit. Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:060 Section 12]
T-147	PART IV - Corrective Action - Applicability: SWMUs which are identified as DOE Material Storage Areas (DMSAs) for which the permittee has submitted SWMU Assessment Reports and are under review by the Cabinet are listed in Appendix A-4(a) of this permit. SWMUs requiring five-year review are identified in Appendix A-6 of this permit. Based on the following regulation(s) effective on 3/12/1997: [401 KAR 34:060 Section 12]
T-148	PART IV - Corrective Action - Applicability: The Corrective Action conditions apply to any additional SWMUs or Areas of Concern (AOCs) discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means. As used in this part of the permit, the terms "discover", "discovery", or "discovered" refer to the date on which the Permittee either (1) visually observes evidence of a new SWMU or AOC, (2) visually observes evidence of a previously unidentified release of hazardous constituents to the environment, or (3) receives information which suggests the presence of a new release of hazardous waste or hazardous constituents to the environment. Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:060 Section 12]

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#### PART IV - Corrective Action - Applicability:

Condition No.	Condition
149	PART IV - Corrective Action - Applicability: The Corrective Action conditions apply to contamination beyond the facility boundary, if applicable. The Permittee shall implement corrective actions beyond the facility boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates to the satisfaction of the Hazardous Waste Branch Manager that, despite the Permittee's best efforts, as determined by the Branch Manager, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:060 Section 12]

#### PART IV - Corrective Action - Notification and Assessment Requirements for Newly Identified SWMUs and AOCs:

Condition No.	Condition
150	PART IV - Corrective Action - Notification and Assessment Requirements for Newly Identified SWMUs and AOCs: The Permittee shall notify the Hazardous Waste Branch Manager in writing, within fifteen (15) calendar days of discovery, of any additional SWMUs or AOC's discovered under any conditions. The notification shall include, at a minimum, the location of the units and all available information pertaining to the nature of the release (e.g., media affected, hazardous constituents released, magnitude of release, etc.). If the Hazardous Waste Branch Manager determines that further investigations are required, the permit shall be modified. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]. [401 KAR 34:060 Section 12]
151	PART IV - Corrective Action - Notification and Assessment Requirements for Newly Identified SWMUs and AOCs: The Permittee shall prepare and submit to the Hazardous Waste Branch Manager, within ninety (90) calendar days of notification, a SWMU Assessment Report (SAR) for each new SWMU identified at the facility. At a minimum, the SAR shall provide the following information: Location of unit(s) on a topographic map of appropriate scale as required under 401 KAR 38:090; Designation of type and function of unit(s); General dimensions, capacities and structural description of unit(s) (supply any available plans/drawings); Dates that the unit(s) was operated; Specification of all wastes that have been managed at/in the unit(s) to the extent available (Include any available data on constituents in the wastes); and, All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s) (to include groundwater data, soil analyses, air, and/or surface water data). Based on the following regulations effective on 3/12/1997: [401 KAR 34:060 Section 12, 401 KAR 31:170]

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#### **PART IV - Corrective Action - Notification Requirements for Newly Discovered Releases at Previously Identified SWMUs or AOCs:**

Condition No.	Condition
I-152	PART IV - Corrective Action - Notification Requirements for Newly Discovered Releases at Previously Identified SWMUs or AOCs: The Permittee shall notify the Hazardous Waste Branch Manager in writing of any newly discovered release(s) of hazardous waste or hazardous constituents from previously identified SWMUs or AOCs for which further investigations were not required within fifteen (15) days of discovery. If the Hazardous Waste Branch Manager determines that further investigation of the SWMUs or AOCs is needed, the Permittee shall be required to prepare a plan for such investigations. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
I-153	PART IV - Corrective Action - Notification Requirements for Newly Discovered Releases at Previously Identified SWMUs or AOCs: If the Hazardous Waste Branch Manager determines that further investigation of the SWMUs or AOCs is needed, the Permittee shall be required to prepare a plan for such investigations. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]

#### **PART IV - Corrective Action - Confirmatory Sampling (CS):**

Condition No.	Condition
I-154	PART IV - Corrective Action - Confirmatory Sampling (CS): The Permittee shall prepare and submit to the Hazardous Waste Branch Manager in accordance with Appendix D or within ninety (90) calendar days of notification by the Branch Manager that a Confirmatory Sampling Work Plan is required for any newly discovered or identified SWMU or AOC, a Confirmatory Sampling Work Plan. The CS Work Plan shall include schedules of implementation and completion of specific actions necessary to determine whether or not a release has occurred. It shall also address applicable requirements and affected media. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
I-155	PART IV - Corrective Action - Confirmatory Sampling (CS): The CS Work Plan shall be approved by the Hazardous Waste Branch Manager, in writing, prior to implementation. The Hazardous Waste Branch Manager shall specify the start date of the CS Work Plan schedule in the letter approving the CS Work Plan. If the Hazardous Waste Branch Manager disapproves the CS Work Plan, the Branch Manager will either (1) notify the Permittee in writing of the CS Work Plan's deficiencies and specify a due date for submission of a revised CS Work Plan, (2) revise the CS Work Plan and notify the Permittee of the revisions, or (3) conditionally approve the CS Work Plan and notify the Permittee of the conditions. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
I-156	PART IV - Corrective Action - Confirmatory Sampling (CS): The Permittee shall implement the confirmatory sampling in accordance with the approved CS Work Plan. Based on the following regulation(s) effective on 03/12/97: [401 KAR 34:060 Section 12]

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#### **PART IV - Corrective Action - Confirmatory Sampling (CS):**

Condition No.	Condition
T-157	PART IV - Corrective Action - Confirmatory Sampling (CS): The Permittee shall prepare and submit to the Hazardous Waste Branch Manager in accordance with Appendix D - "Schedule of Compliance", or the schedule in the approved CS Work Plan, a Confirmatory Sampling (CS) Report identifying those SWMUs or AOCs that have released hazardous waste or hazardous constituents into the environment. The CS Report shall include all data, including raw data, and a summary and analysis of the data that supports the above determination. Submittal of a CS Report may be satisfied by the submittal of a Site Evaluation Report or a Site Investigation/Risk Assessment Report. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
T-158	PART IV - Corrective Action - Confirmatory Sampling (CS): Based on the results of the CS Report, the Hazardous Waste Branch Manager will determine the need for further investigations at the SWMUs or AOCs covered in the CS Report. If the Hazardous Waste Branch Manager determines that such investigations are needed, the Permittee shall be required to prepare a RCRA Facility Investigation Work Plan. The Hazardous Waste Branch Manager will notify the Permittee of any no further action decision. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]

#### **PART IV - Corrective Action - RCRA Facility Investigation (RFI):**

Condition No.	Condition
T-159	PART IV - Corrective Action - RCRA Facility Investigation (RFI): The Permittee shall prepare and submit to the Manager, within one hundred eighty (180) calendar days upon notification from the Hazardous Waste Branch Manager that a RCRA Facility Investigation (RFI) Work Plan(s) is needed or, in accordance with Appendix D to Part IV - "Schedule of Compliance", or the time frame established in the Confirmatory Sampling Report or in the Branch Manager's response to the report a RFI Work Plan(s) for any of the units identified in this permit. The SWMUs and AOCs identified in Appendix A-1 of this permit, which require further investigation have been further segregated into groupings or Operable Units (OUs). These groupings or OUs and the corresponding SWMUs and AOCs are identified in Appendix A-5 of this permit.

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#### PART IV - Corrective Action - RCRA Facility Investigation (RFI):

Condition No.	Condition
T-160	PART IV - Corrective Action - RCRA Facility Investigation (RFI): The RFI Work Plan(s) shall meet the requirements of Appendix B to Part IV this permit - "RCRA Facility Investigation (RFI) Workplan Outline" as applicable. The Work Plan(s) shall include schedules of implementation and completion of specific actions necessary to determine the nature and extent of releases and the potential pathways of contaminant releases to the air, land, surface water, and groundwater. The Permittee shall provide sufficient justification and/or documentation that a release is not probable or a pathway is not complete if a unit or a media/pathway associated with a unit (groundwater, surface water, soil, subsurface gas, or air) is not included in the RFI Work Plan(s). Such deletions of a unit, media or pathway from the RFI(s) are subject to the approval of the Hazardous Waste Branch Manager. The Permittee shall provide sufficient written justification for any omissions or deviations from the minimum requirements of Appendix B to Part IV of this permit. Such omissions or deviations are subject to the approval of the Hazardous Waste Branch Manager. In addition, the scope of the RFI Workplan(s) shall include all investigations necessary to ensure compliance with 401 KAR 34:060, Section 12. The RFI Work Plan(s) shall also include a schedule for submitting RFI Progress Reports. Submittal of a RFI Work Plan may be satisfied by the submittal of a RI/FS Work Plan. Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:060 Section 12]
T-161	PART IV - Corrective Action - RCRA Facility Investigation (RFI): The RFI Work Plan(s) must be approved by the Hazardous Waste Branch Manager, in writing, prior to implementation. The Manager shall specify the start date of the RFI Work Plan schedule in the letter approving the RFI Work Plan. If the Hazardous Waste Branch Manager disapproves the RFI Work Plan(s), the Branch Manager will either (1) notify the Permittee in writing of the RFI Work Plan's deficiencies and specify a due date for submission of a revised RFI Work Plan, or (2) revise the RFI Work Plan and notify the Permittee of the revisions and start date of the schedule within the approved RFI Work Plan, or (3) conditionally approve the RFI Work Plan and notify the Permittee of the conditions. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
T-162	PART IV - Corrective Action - RCRA Facility Investigation (RFI): The Permittee shall implement the RFI(s) in accordance with the schedule in Appendix D to Part IV - "Schedule of Compliance" or the approved RFI Work Plan(s) and Appendix B to Part IV - "RCRA Facility Investigation (RFI) Workplan Outline," as applicable. The Permittee shall notify the Hazardous Waste Branch Manager, at least one week prior to any sampling activity where time-specific schedules have not been previously approved by the Hazardous Waste Manager. This notification may describe an ongoing nature of the sampling activity. Notification may be submitted in writing or in an electronic format. Electronic mail shall be submitted to pgdp.notify@ky.gov. Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:060 Section 12]

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#### PART IV - Corrective Action - RCRA Facility Investigation (RFI):

Condition No.	Condition
T-163	PART IV - Corrective Action - RCRA Facility Investigation (RFI): If the time required to conduct the RFI(s) is greater than one hundred and eighty (180) calendar days, the Permittee shall provide the Hazardous Waste Branch Manager with semi-annual RFI Progress Reports. These reports shall be submitted to the Hazardous Waste Branch Manager on or before April 30 and October 30. The Progress Reports may be combined with multiple projects and shall contain the following information at a minimum: a description of the portion of the RFI completed, summaries of findings, summaries of any deviations from the approved RFI Work Plan during the reporting period, summaries of all contacts with local community public interest groups, summaries of any problems or potential problems encountered during the reporting period, actions taken to rectify problems, changes in relevant personnel, projected work for the next reporting period, summaries of laboratory/monitoring data, etc., and the presence of high levels of hazardous wastes and hazardous constituents in soils and groundwater. Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:060 Section 12]
T-164	PART IV - Corrective Action - RCRA Facility Investigation (RFI): The Permittee shall prepare and submit to the Hazardous Waste Branch Manager, Draft and Final RCRA Facility Investigation Report(s) for the investigations conducted pursuant to the RFI Work Plan(s). The Draft RFI Report(s) shall be submitted to the Hazardous Waste Branch Manager for review in accordance with the schedule in the approved RFI Work Plan(s). The Final RFI Report(s) shall be submitted to the Hazardous Waste Branch Manager within sixty (60) calendar days of receipt of the Manager's comment on the draft RFI Report. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
T-165	PART IV - Corrective Action - RCRA Facility Investigation (RFI): The RFI Report(s) shall include an analysis and summary of all required investigations of SWMUs and AOCs and their results. The summary shall describe the type and extent of contamination at the facility, including sources and migration pathways, identify all hazardous constituents present in all media, and describe actual or potential receptors. The RFI Report(s) shall also describe the extent of contamination (qualitative/quantitative) in relation to background levels indicative of the area. The objective of this task shall be to ensure that the investigation data are sufficient in quality (e.g., quality assurance procedures have been followed) and quantity to describe the nature and extent of contamination, potential threat to human health and/or the environment, and to support a Corrective Measures Study or Remedial Measures, if necessary. The Hazardous Waste Branch Manager will review the Final RFI Report(s) and notify the Permittee of the need for further investigations and/or the need for a Corrective Measures Study or Remedial Measures to meet the requirements of Interim Measures. The Hazardous Waste Branch Manager will notify the Permittee of any No Further Action decision. Any further investigative action required by the Hazardous Waste Branch Manager shall be prepared and submitted in accordance with a schedule specified by the Branch Manager. Submittal of a RFI Report may be satisfied by the submittal of a RI Report. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]

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#### PART IV - Corrective Action - Interim Measures (IM):

Condition No.	Condition
T-166	PART IV - Corrective Action - Interim Measures (IM): Upon notification by the Hazardous Waste Branch Manager, the Permittee shall prepare and submit a Removal Notification for any SWMU or AOC which the Manager determines poses a current or potential threat to human health or the environment. The Removal Notification shall include SARs (as warranted) in accordance with the conditions of this permit, a description of the factors the Permittee has considered in determining if a Removal Action is appropriate. The Removal Notification shall contain adequate specificity in defining the nature, extent, and duration of the proposed action to permit meaningful review and comment. The Removal Notification shall be submitted within ninety (90) calendar days of such notification and contain a schedule for submission of an Engineering Evaluation/Cost Analysis (EE/CA) to further evaluate removal alternatives. [401 KAR 34:060 Section 12]
T-167	PART IV - Corrective Action - Interim Measures (IM): In accordance with Appendix D to Part IV - "Schedule of Compliance", or the schedule in the approved Removal Notification, the Permittee shall prepare an EE/CA to further evaluate removal alternatives. Upon approval of an EE/CA by the Manager, the Permittee shall make the Removal Notification, the EE/CA, and the Administrative Record available for public comment. Public comments will be received by the Permittee and/or the Manager. If any data, information or arguments submitted during the public comment period appear to raise substantial new questions concerning the proposed removal action, the manager may reopen or extend the comment period. The Manager may schedule a public hearing when a significant degree of public interest or opposition to the Removal Action is found. Within thirty (30) days of the close of the public comment period, the Permittee shall submit to the Manager an Action Memorandum which responds to public comments and describes the selected Removal Action. [401 KAR 34:060 Section 12]
T-168	PART IV - Corrective Action - Interim Measures (IM): In accordance with Appendix D to Part IV - "Schedule of Compliance", or within 90 days of notification by the Hazardous Waste Branch Manager that an IM Work Plan is required, or within 30 days of approval of an Action Memorandum, the Permittee shall prepare and submit an Interim Measures (IM) Work Plan for any SWMU or AOC that the Branch Manager determines is necessary. Interim measures should be designed to minimize or prevent the further migration of contaminants and limit human and environmental exposure to contaminants while long-term corrective action remedies are evaluated and, if necessary, implemented. Such interim measures may be conducted concurrently with investigations required under the terms of this permit. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
T-169	PART IV - Corrective Action - Interim Measures (IM): The IM Work Plan shall ensure that the interim measures are designed to mitigate any current or potential threat(s) to human health or the environment and is consistent with and integrated into any long-term solution at the facility. The IM Work Plan shall include: the interim measures objectives, procedures for implementation (including any designs, plans, or specifications), and schedules for implementation. Submittal of an IM Work Plan may be satisfied by the submittal of a Removal Action Work Plan or an Interim Remedial Action Work Plan. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]



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#### PART IV - Corrective Action - Interim Measures (IM):

Condition No.	Condition
T-170	PART IV - Corrective Action - Interim Measures (IM): The IM Work Plan must be approved by the Hazardous Waste Branch Manager, in writing, prior to implementation. The Hazardous Waste Branch Manager will specify the start date of the IM Work Plan schedule in the letter approving the IM Work Plan. If the Hazardous Waste Branch Manager disapproves the IM Work Plan, the Branch Manager will either (1) notify the Permittee in writing of the IM Work Plan's deficiencies and specify a due date for submission of a revised IM Work Plan, or (2) revise the IM Work Plan and notify the Permittee of the revisions and the start date of the schedule within the approved IM Work Plan, or (3) conditionally approve the IM Work Plan and notify the Permittee of the conditions. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
T-171	PART IV - Corrective Action - Interim Measures (IM): The Permittee shall implement interim measures in accordance with the approved IM Work Plan. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
T-172	PART IV - Corrective Action - Interim Measures (IM): The Permittee shall give notice to the Hazardous Waste Branch Manager as soon as possible of any planned changes, reductions, or additions to the IM Work Plan. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
T-173	PART IV - Corrective Action - Interim Measures (IM): Final approval of corrective action which is achieved through interim measures shall be in accordance with a permit modification. Based on the following regulation(s) effective on 3/12/1997. [401 KAR 34:060 Section 12, 401 KAR 38:040 Section 2]
T-174	PART IV - Corrective Action - Interim Measures (IM): If the time required for completion of interim measures is greater than one year, the Permittee shall provide the Hazardous Waste Branch Manager with semi-annual progress reports. These reports shall be submitted to the Hazardous Waste Branch Manager on or before the 30th day of October and April of each fiscal year. The Progress Reports may be combined with multiple projects and shall contain the following information at a minimum: a description of the portion of the interim measures completed; summaries of all deviations from the IM Work Plan during the reporting period; summaries of all problems or potential problems encountered during the reporting period; projected work for the next reporting period; and copies of laboratory/monitoring data. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
T-175	PART IV - Corrective Action - Interim Measures (IM): The Permittee shall prepare and submit to the Hazardous Waste Branch Manager, within ninety (90) calendar days of completion of interim measures, an Interim Measures (IM) Report. Submittal of an IM report may be satisfied by the submittal of a Removal Action Report, Remedial Action Report, or a Post-Construction Report. The IM Report shall contain the following information at a minimum: a description of interim measures implemented; summaries of results; summaries of all problems encountered; summaries of accomplishments and/or effectiveness of interim measures; and copies of all relevant laboratory/monitoring data. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]

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#### PART IV - Corrective Action - Corrective Measures Study (CMS):

Condition No.	Condition
T-176	PART IV - Corrective Action - Corrective Measures Study (CMS): The Permittee shall prepare and submit a CMS Work Plan for those units requiring a CMS in accordance with the schedule in the Final RFI Report or within one hundred and eighty (180) calendar days of notification by the Hazardous Waste Branch Manager that a CMS is required. The CMS shall be developed to meet the requirements of Appendix C - "Corrective Measures Study (CMS) Outline", as applicable. The CMS shall include schedules of implementation and completion of specific actions necessary to complete the study. The Permittee must provide sufficient justification and/or documentation for any unit deleted from the CMS. Such deletion of a unit is subject to the approval of the Manager. Implementation of the CMS shall be conducted in accordance with the approved CMS. The Permittee shall provide sufficient written justification for any omissions or deviations from the minimum requirements of Appendix C. Such omissions or deviations are subject to the approval of the Hazardous Waste Branch Manager. Submittal of a CMS Work Plan may be satisfied by the submittal of a RI/FS Work Plan. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
T-177	PART IV - Corrective Action - Corrective Measures Study (CMS): The Hazardous Waste Branch Manager will either approve or disapprove, in writing, the CMS Work Plan. If the Hazardous Waste Branch Manager disapproves the CMS Work Plan, the Branch Manager will either (1) notify the Permittee in writing of the CMS Work Plan's deficiencies and specify a due date for submittal of a revised CMS Work Plan, or (2) revise the CMS Work Plan and notify the Permittee of the revisions and the start date of the schedule within the approved CMS work Plan, or (3) conditionally approve the CMS Work Plan and notify the Permittee of the conditions. Based on the following regulations(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
T-178	PART IV - Corrective Action - Corrective Measures Study (CMS): The Permittee shall begin to implement the Corrective Measures Study or the RI/FS Work Plan in accordance with the approved schedules after the Permittee has received written approval from the Hazardous Waste Branch Manager for the CMS. Based on the following regulations(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
T-179	PART IV - Corrective Action - Corrective Measures Study (CMS): The Permittee shall prepare and submit to the Hazardous Waste Branch Manager a draft and final CMS report for the study conducted pursuant to the approved CMS Work Plan, or in accordance with Appendix D to Part IV - "Schedule of Compliance". The draft CMS Report shall be submitted to the Hazardous Waste Branch Manager per the schedule approved in the CMS Work Plan. The final CMS Report shall be submitted to the Hazardous Waste Branch Manager within sixty (60) days of receipt of the Branch Manager's comments on the draft CMS Report. The final CMS Report shall: summarize any bench-scale or pilot tests conducted; include an evaluation of each remedial alternative; present all information gathered under the approved CMS Work Plan; and contain adequate information to support the Hazardous Waste Branch Manager's decision on the recommended remedy. Submittal of a CMS Report may be satisfied by the submittal of a Feasibility Study Report. Based on the following regulations effective on 3/12/97: [401 KAR 34:060 Section 12]

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#### PART IV - Corrective Action - Corrective Measures Study (CMS):

Condition No.	Condition
T-180	PART IV - Corrective Action - Corrective Measures Study (CMS): If the Hazardous Waste Branch Manager determines that the Final CMS Report does not fully satisfy the information requirements, the Branch Manager may disapprove the Final CMS Report. If the Hazardous Waste Branch Manager disapproves the Final CMS Report, the Branch Manager will notify the Permittee in writing of deficiencies in the Final CMS Report and specify a due date for submittal of a revised Final CMS Report. The Hazardous Waste Branch Manager will notify the Permittee of any no further action decision. Based on the following regulations effective on 3/12/97: [401 KAR 34:060 Section 12]
T-181	PART IV - Corrective Action - Corrective Measures Study (CMS): Based on preliminary results and the Final CMS Report, the Hazardous Waste Branch Manager may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies. Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:060 Section 12]

#### PART IV - Corrective Action - Remedy Approval and Permit Modification:

Condition No.	Condition
T-182	PART IV - Corrective Action - Remedy Approval and Permit Modification: A remedy shall be selected from the remedial alternatives evaluated in the CMS. It will be based at a minimum on specific site conditions, existing regulations and guidance, and protection of human health and the environment. The selected remedy may include any interim measures implemented. Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:060 Section 12]
T-183	PART IV - Corrective Action - Remedy Approval and Permit Modification: A permit modification may be initiated by the Hazardous Waste Branch Manager after recommendation of a remedy. This modification will serve to incorporate a final remedy into this permit. Records of Decision for final remedies are incorporated into this permit as Appendix F - "Records of Decision for Operable Units". Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:060 Section 12, 401 KAR 38:040 Section 2]

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#### PART IV - Corrective Action - Modification of the Corrective Action Schedule of Compliance:

Condition No.	Condition
T-184	PART IV - Corrective Action - Modification of the Corrective Action Schedule of Compliance: If at any time, the Hazardous Waste Branch Manager determines that modification of the Corrective Action Schedule of Compliance is necessary, the Branch Manager may initiate a modification to the Corrective Action Schedule of Compliance as outlined in Appendix E to Part IV - "Modification of the Corrective Action Schedule of Compliance. Based on the following regulation(s) effective on 03/12/1997: [401 KAR 34:060 Section 12, 401 KAR 38:040]
T-185	PART IV - Corrective Action - Modification of the Corrective Action Schedule of Compliance: Modifications that are initiated and finalized by the Hazardous Waste Branch Manager, in accordance with proper procedure, as outlined in Appendix E to Part IV - "Modification of the Corrective Action Schedule of Compliance", shall proceed as described in 401 KAR 38:040. [401 KAR 38:040 Section 2]
T-186	PART IV - Corrective Action - Modification of the Corrective Action Schedule of Compliance: Modifications to the corrective action schedule will not constitute a reissuance of the permit. Based on the following regulation(s) effective on 3/12/97: [401 KAR 38:050 Section 2]
T-187	PART IV - Corrective Action - Modification of the Corrective Action Schedule of Compliance: At the discretion of the Hazardous Waste Branch Manager, modifications to the Corrective Action Schedule of Compliance (Appendix D) that are initiated by the Permittee may proceed as a minor modification in accordance with the regulation(s) specified in this paragraph. Minor modifications to the Corrective Action Schedule of Compliance will be limited to changes in interim dates. [401 KAR 38:030 Section 3 and 4]

#### PART IV - Corrective Action - Imminent Hazards:

Condition No.	Condition
T-188	PART IV - Corrective Action - Imminent Hazards: The Permittee shall report to the Hazardous Waste Branch Manager any potential or existing imminent hazard to public health or the environment from any release of hazardous waste or hazardous constituents. Such information shall be reported orally within two (2) hours from such time the Permittee becomes aware of the circumstances. Based on the following regulations(s) effective on 3/12/97: [401 KAR 34:060 Section 12, 401 KAR 34:040 Section 7(10), 401 KAR 38:030 Section 1(12)(f)]
T-189	PART IV - Corrective Action - Imminent Hazards: A written report shall also be provided to the Hazardous Waste Branch Manager within fifteen (15) calendar days of the time the Permittee becomes aware of the circumstances. The written report shall contain a description of the release and its cause; the period of the release; whether the release has been stopped; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the release. Based on the following regulations(s) effective on 3/12/97: [401 KAR 34:040 Section 7(10)]

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#### PART IV - Corrective Action - Work Plan and Report Requirements:

Condition No.	Condition
T-190	PART IV - Corrective Action - Work Plan and Report Requirements: The Permittee shall submit a Remedial Design Report in accordance with the schedules in Appendix D to Part IV - "Schedule of Compliance". The Remedial Design Report is an element of Corrective Measures Implementation as outlined under Part IV - Corrective Action - Work Plan and Report Requirements of this permit.
T-191	PART IV - Corrective Action - Work Plan and Report Requirements: The Permittee shall submit a Remedial Action Work Plan in accordance with the schedules in Appendix D to Part IV - "Schedule of Compliance". The Remedial Action Work Plan is an element of Corrective Measures Implementation as outlined under Part IV - Corrective Action - Work Plan and Report Requirements of this permit.
T-192	PART IV - Corrective Action - Work Plan and Report Requirements: The Permittee shall submit a Post-Construction Report in accordance with the schedules in Appendix D to Part IV - "Schedule of Compliance". The Post-Construction Report is an element of Corrective Measures Implementation as outlined under Part IV - Corrective Action - Work Plan and Report Requirements of this permit. [401 KAR 34:060 Section 12]
T-193	PART IV - Corrective Action - Work Plan and Report Requirements: The Permittee shall submit an Operations and Maintenance Plan in accordance with the schedules in Appendix D to Part IV - "Schedule of Compliance". The Operations and Maintenance Plan is an element of Corrective Measures Implementation as outlined under Part IV - Corrective Action - Work Plan and Report Requirements of this permit.
T-194	PART IV - Corrective Action - Work Plan and Report Requirements: The Permittee shall submit a Final Remediation Report in accordance with the schedules in Appendix D to Part IV - "Schedule of Compliance". The Final Remediation Report is an element of Corrective Measures Implementation as outlined under Part IV - Corrective Action - Work Plan and Report Requirements of this permit.
T-195	PART IV - Corrective Action - Work Plan and Report Requirements: All work plans and schedules shall be subject to approval by the Hazardous Waste Branch Manager prior to implementation to assure that such work plans and schedules are consistent with the requirements of this permit and with applicable regulations and guidance. The Permittee shall revise all submittals and schedules as specified by the Hazardous Waste Branch Manager. Upon approval, the Permittee shall implement all work plans and schedules as written. Based on the following regulations(s) effective on 3/12/97: [401 KAR 34:060 Section 12]
T-196	PART IV - Corrective Action - Work Plan and Report Requirements: All work plans and reports shall be submitted in accordance with the approved schedule. Extensions of the due date for submittals may be granted by the Hazardous Waste Branch Manager based on the Permittee's demonstration that sufficient justification for the extension exists. Based on the following regulations(s) effective on 3/12/97: [401 KAR 34:060 Section 12]

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#### PART IV - Corrective Action - Work Plan and Report Requirements:

Condition No.	Condition
T-197	PART IV - Corrective Action - Work Plan and Report Requirements: If the Permittee or the Division at any time determines that the SWMU Assessment Report (SAR) information, the Confirmatory Sampling (CS) Work Plan, or the RCRA Facility Investigation (RFI) Work Plan(s) no longer satisfy the requirements of this permit for prior or continuing releases of hazardous waste or hazardous constituents from Solid Waste Management Units and/or Areas of Concern, the Permittee must submit the amended SAR, CS Work Plan(s), or RFI Work Plan to the Hazardous Waste Branch Manager within ninety (90) calendar days of such determination or from receiving notification from the Division. Based on the following regulations(s) effective on 03/12/1997: [401 KAR 34:060 Section 12]
T-198	PART IV - Corrective Action - Work Plan and Report Requirements: All reports shall be signed and certified in accordance with applicable requirements. Based on the following regulations(s) effective on 3/12/97: [401 KAR 38:070 Section 7, 401 KAR 38:070 Section 7]
T-199	PART IV - Corrective Action - Work Plan and Report Requirements: Four (4) copies of all reports and work plans shall be provided by the Permittee to the Hazardous Waste Branch Manager at the following address: Manager, Hazardous Waste Branch, Department for Environmental Protection, Division of Waste Management, 14 Reilly Road, Frankfort, Kentucky 40601. As warranted, additional copies may be requested by the Cabinet. Less than four copies may be submitted for select documents upon approval from the Hazardous Waste Branch Manager. Based on the following regulations(s) effective on 3/12/97: [401 KAR 34:060 Section 12]

#### PART IV - Corrective Action - Approval/Disapproval of Submittals:

Condition No.	Condition
T-200	PART IV - Corrective Action - Approval/Disapproval of Submittals: The Hazardous Waste Branch Manager will review the work plans, reports, schedules, and other documents ("submittals") which require the Hazardous Waste Branch Manager's approval in accordance with the conditions of this permit. The Hazardous Waste Branch Manager will notify the Permittee in writing of any submittal that is disapproved, and the basis thereof. In the event the Permittee disagrees, in whole or in part, with the Hazardous Waste Branch Manager's decision of a submittal or disapproval of any revised submittal required by the permit, the Permittee has the right to seek a hearing. Based on the following regulations effective on 3/12/1997: [KRS 224.10-420(2), KRS 224.10]

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#### **PART V - Waste Minimization - General Restrictions:**

Condition No.	Condition
T-201	PART V - Waste Minimization - General Restrictions: Pursuant to the specified regulation(s) in this condition, the Permittee must certify, no less often than annually, that: a) The Permittee has a program in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by the Permittee to be economically practicable; and b) The proposed method of treatment, storage, or disposal is the most practicable method available to the Permittee which minimizes the present and future threat to human health and the environment. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:050 Section 4(2)(i)]

#### **PART V - Waste Minimization - Recordkeeping Requirements:**

Condition No.	Condition
T-202	PART V - Waste Minimization - Recordkeeping Requirements: The Permittee shall maintain copies of this certification in the facility operating record as required by the regulation(s) specified in this condition. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:050 Section 4(2)(i)]

#### **PART V - Waste Minimization - Objectives:**

Condition No.	Condition
T-203	PART V - Waste Minimization - Objectives: The Permittee shall maintain and update the following documents: a) A policy dated and signed, by management, describing management support for waste minimization and for implementation of a waste minimization plan. b) A description of employee awareness and training programs designed to involve employees in waste minimization planning and implementation to the maximum extent feasible. c) A description specifying how a waste minimization plan has been incorporated into management practices so as to ensure ongoing efforts with respect to product design, capital planning, production operations, and maintenance. Based on the following regulation(s) effective 03/12/1997: [KRS 224.46-530(1)(g), 401 KAR 34:050 Section 4(2)(i)]
T-204	PART V - Waste Minimization - Objectives: The Permittee shall identify and document types, amounts, and hazardous constituents of waste streams, with the source and date of generation. Based on the following regulation(s) effective 03/12/1997: [KRS 224.46-530(1)(g), 401 KAR 34:050 Section 4(2)(i)]

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AAZZ1 (continued):

### Narrative Requirements:

#### PART V - Waste Minimization - Objectives:

Condition No.	Condition
T-205	PART V - Waste Minimization - Objectives: The Permittee shall conduct a periodic waste minimization assessment as follows: a) The Permittee shall identify and document all points in a process where materials can be prevented from becoming a waste, or can be recycled. b) The Permittee shall identify the potential for waste reduction and recycling techniques applicable to each waste generated at the facility, with a cost estimate for capital investment and implementation. c) The Permittee shall update and maintain a description of technically and economically practical waste reduction/recycling options to be implemented at the facility, and a planned schedule for implementation. d) The Permittee shall prepare and maintain an adequate assessment for specific performance goals, preferably quantitative, for the source reduction of waste by stream. Whenever possible, goals should be stated as weight of waste generated per standard unit of production, as defined by the generator. Based on the following regulation(s) effective 03/12/1997: [KRS 224.46-530(1)(g), 401 KAR 34:050 Section 4(2)(i)]
T-206	PART V - Waste Minimization - Objectives: The Permittee, on an annual basis, shall update a Cost Allocation System specific to the operation of the facility with respect to waste reduction. The following shall be addressed in preparation of the document: a) Identification of waste management costs for each waste, factoring in liability, transportation, recordkeeping, personnel, pollution control, treatment, disposal, compliance and oversight costs to the extent feasible. b) Description of how each department at the facility is held accountable for the wastes they generate. c) The comparison of waste management costs with costs of potential reduction and recycling techniques applicable to each waste at the facility. Based on the following regulation(s) effective 03/12/1997: [KRS 224.46-530(1)(g), 401 KAR 34:050 Section 4(2)(i)]
T-207	PART V - Waste Minimization - Objectives: The Permittee shall update and maintain at the facility a description of efforts to seek and exchange technical information on waste minimization from, as applicable, other parts of the company, other firms, trade associations, technical assistance programs, and professional consultants. Based on the following regulation(s) effective 03/12/1997: [KRS 224.46-530(1)(g), 401 KAR 34:050 Section 4(2)(i)]
T-208	PART V - Waste Minimization - Objectives: The Permittee, on an annual basis, shall evaluate the waste minimization program specified in "Waste Minimization Program", Attachment K incorporated in this permit. The evaluation, at a minimum shall contain the following: a) Description of types and amounts of hazardous waste reduced or recycled. b) Analysis and quantification of progress made relative to each performance goal established and each reduction technique to be implemented. c) Amendments to waste minimization plan and explanation. d) Explanation and documentation of reduction efforts completed or in progress before development of the waste minimization plan. e) Explanation and documentation regarding impediments to hazardous waste reduction specific to the individual facility. Based on the following regulation(s) effective 3/12/1997: [KRS 224.46-530(1)(g), 401 KAR 34:050 Section 4(2)(i)]



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AAZZ1 (continued):

### Narrative Requirements:

#### PART VI - Land Disposal Restrictions - General Restrictions:

Condition No.	Condition
T-209	PART VI - Land Disposal Restrictions - General Restrictions: 401 KAR Chapter 37 identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances in which an otherwise prohibited waste may continue to be placed on or in a land treatment, storage, or disposal unit. The Permittee shall maintain compliance with the requirements of 401 KAR Chapter 37 unless the provisions of the September 1997 Agreed Order between DOE and the Commonwealth, File No. DWM-30039-042, or the November 15, 1995 Agreed Order between USEC and the Commonwealth, File No. DWM-30042-030, are applicable. Where the Permittee has applied for an extension, waiver, or variance under 401 KAR Chapter 37, the Permittee shall comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached pending final approval of such application. Based on the following regulation(s) effective 03/12/1997: [401 KAR Chapter 37].

#### PART VI - Land Disposal Restrictions - Prohibitions and Treatment Standards:

Condition No.	Condition
T-210	PART VI - Land Disposal Restrictions - Prohibitions and Treatment Standards: A restricted waste identified in 401 KAR Chapter 37 may not be placed in a land disposal unit without further treatment unless the requirements of 401 KAR Chapter 37 are met. Based on the following regulation(s) effective 03/12/1997: [401 KAR Chapter 37]
T-211	PART VI - Land Disposal Restrictions - Prohibitions and Treatment Standards: The storage of hazardous wastes restricted from land disposal under 401 KAR Chapter 37 is prohibited unless the requirements of 401 KAR Chapter 37 are met or the provisions of the September 1997 Agreed Order between DOE and the Commonwealth, File No. DWM-30039-042 or the November 15, 1995 Agreed Order between USEC and the Commonwealth, File No. DWM-30042-030, are applicable. Based on the following regulation(s) effective 03/12/97: [401 KAR Chapter 37]

#### PART VII - RCRA Organic Air Emission Standards - Subpart AA:

Condition No.	Condition
T-212	PART VII - RCRA Organic Air Emission Standards - Subpart AA: On February 10, 1994, Air Emission Standards for Process Vents (401 KAR 34:275) for hazardous waste treatment, storage, and disposal facilities were promulgated. This regulation contains emission standards for process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, and air or steam stripping operations that process hazardous waste with an annual average total organic concentration of at least ten (10) parts per million (ppm) by weight. [401 KAR 34:275]

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AAZZ1 (continued):

### Narrative Requirements:

#### PART VII - RCRA Organic Air Emission Standards - Subpart AA:

Condition No.	Condition
T-213	PART VII - RCRA Organic Air Emission Standards - Subpart AA: The Permittee shall comply with the applicable requirements of 401 KAR 275, (40 CFR 264, Subpart AA). [401 KAR 34:275]
T-214	PART VII - RCRA Organic Air Emission Standards - Subpart AA: The Permittee currently does not have any hazardous waste management units that are regulated under the specified regulation(s) in this condition. [401 KAR 34:275]
T-215	PART VII - RCRA Organic Air Emission Standards - Subpart AA: Prior to constructing any equipment with process vents subject to the requirements of 401 KAR 34:275, the Permittee shall supply the specific Part B information required pursuant to 401 KAR 38:040, and shall obtain a permit modification in accordance with the requirements of 401 KAR 38:040. [401 KAR 34:275]

#### PART VII - RCRA Organic Air Emission Standards - Subpart BB:

Condition No.	Condition
T-216	PART VII - RCRA Organic Air Emission Standards - Subpart BB: On February 10, 1994, Air Emission Standards for Equipment Leaks (401 KAR 34:280) for hazardous waste treatment, storage, and disposal facilities were promulgated. This regulation contains emission standards that address leaks from specific equipment (i.e., pumps, valves, compressors, etc.) that contains or contacts hazardous waste that has an organic concentration of at least ten (10) percent by weight. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:280]
T-217	PART VII - RCRA Organic Air Emission Standards - Subpart BB: The Permittee shall comply with the applicable requirements of 401 KAR 34:280, (40 CFR 264, Subpart BB). Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:280]
T-218	PART VII - RCRA Organic Air Emission Standards - Subpart BB: The Permittee may manage only those hazardous wastes identified in the permit with the equipment listed in Attachment F (Appendix F-3) which is included as part of this permit. The permittee is prohibited from managing hazardous waste that is not identified in this permit. [401 KAR 34:280]
T-219	PART VII - RCRA Organic Air Emission Standards - Subpart BB: The valves listed in Attachment F shall be monitored monthly using Reference Method 21, and must maintain a reading of less than 10,000 ppm. Any valve for which a leak is not detected for two successive months shall be monitored the first month of each succeeding quarter until a leak is detected. If a leak is detected, the Permittee shall resume monitoring the valve monthly until a leak is not detected for two successive months. All leaks must be repaired and in compliance no later than fifteen (15) calendar days after leak detection, and a first attempt at repair must be made no later than five (5) calendar days after leak detection. [401 KAR 34:280]

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AAZZ1 (continued):

### Narrative Requirements:

#### PART VII - RCRA Organic Air Emission Standards - Subpart BB:

Condition No.	Condition
T-220	PART VII - RCRA Organic Air Emission Standards - Subpart BB: The pumps listed in Attachment F shall be inspected weekly and monitored monthly using Reference Method 21, and must maintain a reading less than 10,000 ppm. The pumps must comply with the leak detection and repair program. [401 KAR 34:280]
T-221	PART VII - RCRA Organic Air Emission Standards - Subpart BB: The Permittee shall keep on file the following equipment information: a) listing of an identification number for each piece of equipment that contains or contacts hazardous waste with organic concentration of at least 10 percent by weight; b) the respective hazardous waste management unit identification; c) each piece of equipment's specific location at the facility; d) the type of equipment (i.e., valve, pump, compressor, pressure relief device, open-ended valve or line, flange, or other connector, associated air emission control device, or system); e) the hazardous waste state at the equipment; and f) the method of compliance with the standard. [401 KAR 34:280]
T-222	PART VII - RCRA Organic Air Emission Standards - Subpart BB: The Permittee must identify each piece of leaking equipment and provide required record keeping. The Permittee shall keep on file and update design documentation and monitoring, operating, and inspection information for all closed-vent systems and control devices. [401 KAR 34:280]
T-223	PART VII - RCRA Organic Air Emission Standards - Subpart BB: The Permittee shall comply with the information requirements for applicable equipment, and keep on file all information used in determining exemptions. [401 KAR 34:280]
T-224	PART VII - RCRA Organic Air Emission Standards - Subpart BB: The Permittee shall report semiannually to the Director beginning six (6) months after the effective date of this permit, the information of valve, pump, and/or compressor leaks that were not repaired in accordance with requirements, the dates of hazardous waste management unit shutdowns; and where control devices are in use, the dates in each month during the reporting period when a control device exceeded or operated outside the design specifications, which was not corrected within 24 hours. [401 KAR 34:280]

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AAZZ1 (continued):

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#### PART VII - RCRA Organic Air Emission Standards - Subpart CC:

Condition No.	Condition
T-225	PART VII - RCRA Organic Air Emission Standards - Subpart CC: On March 12, 1997, Air Emission Standards for Tanks, Surface Impoundments, and Containers for hazardous waste treatment, storage, and disposal facilities were promulgated (401 KAR 34:281). This regulation contains organic air emission standards for tanks, containers, surface impoundments, and miscellaneous units which manage hazardous waste containing an average volatile organic concentration of greater than or equal to 100 ppmw at the point of waste origination. Federal Air Emission Standards for Tanks, Surface Impoundments, and Containers (40 CFR 264, Subpart CC) contains standards for tanks, containers, and miscellaneous units which manage hazardous waste containing an average volatile organic concentration of greater than or equal to 500 ppmw at the point of waste origination determined by the procedures outlined in 40 CFR 264.1083(a), except as specifically exempted under 40 CFR 264.1080 and 264.1082. [401 KAR 34:281]
T-226	PART VII - RCRA Organic Air Emission Standards - Subpart CC: The Permittee shall comply with the applicable requirements of 401 KAR 34:281 (40 CFR 264, Subpart CC). Based on the following regulation effective 3/12/1997: [401 KAR 34:281]
T-227	PART VII - RCRA Organic Air Emission Standards - Subpart CC: The Permittee currently does not have any hazardous waste management units that are regulated under 401 KAR 34:281. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:281]
T-228	PART VII - RCRA Organic Air Emission Standards - Subpart CC: Prior to installing any tank, container, surface impoundment, or miscellaneous unit subject to 40 CFR 264, Subpart CC, the Permittee shall apply for a permit modification under 401 KAR 38:040, and provide specific Part B application information required under 401 KAR 38:090, 401 KAR 38:150 through 38:170, as applicable, with the modification request. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:281]

#### PART VIII - Referenced Attachments:

Condition No.	Condition
T-229	PART VIII - Referenced Attachments: The facility Part A Permit Application is incorporated as Attachment A of this permit. [KRS 224.46-530(1)(g)]
T-230	PART VIII - Referenced Attachments: The Facility Description is incorporated as Attachment B of this permit. [KRS 224.46-530(1)(g)]
T-231	PART VIII - Referenced Attachments: The Waste Analysis Plan and facility waste characteristics are incorporated as Attachment C of this permit. [KRS 224.46-530(1)(g)]
T-232	PART VIII - Referenced Attachments: The facility Process Information is incorporated as Attachment D of this permit. [KRS 224.46-530(1)(g)]

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AAZZ1 (continued):

### Narrative Requirements:

#### PART VIII - Referenced Attachments:

Condition No.	Condition
T-233	PART VIII - Referenced Attachments: The facility Groundwater Monitoring and Corrective Action information are incorporated as Attachment E of this permit. [KRS 224.46-530(1)(g)]
T-234	PART VIII - Referenced Attachments: The Procedures to Prevent Hazards at the facility are incorporated as Attachment F of this permit. [KRS 224.46-530(1)(g)]
T-235	PART VIII - Referenced Attachments: The facility Contingency Plan is incorporated as Attachment G and of this permit. [KRS 224.46-530(1)(g)]
T-236	PART VIII - Referenced Attachments: The facility Personnel Training information is incorporated as Attachment H of this permit. [KRS 224.46-530(1)(g)]
T-237	PART VIII - Referenced Attachments: The facility Closure Plan is incorporated as Attachment I of this permit. [KRS 224.46-530(1)(g)]
T-238	PART VIII - Referenced Attachments: Attachment J of this permit contains information concerning Other Federal Laws and is incorporated as a part of this permit. [KRS 224.46-530(1)(g)]
T-239	PART VIII - Referenced Attachments: Attachment K contains information concerning facility's Waste Minimization Program and is incorporated as a part of this permit. [KRS 224.46-530(1)(g)]
T-240	PART VIII - Referenced Attachments: Attachment L contains information concerning Owner/Operator Certification Statement and is incorporated as a part of this permit. [KRS 224.46-530(1)(g)]

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### STO2 (Container Storage) Container storage.:

#### Narrative Requirements:

##### PART II - Specific Conditions - Management of Hazardous Waste in Containers:

Condition No.	Condition
T-1	PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall construct, operate, maintain, and inspect the container storage area(s) specified in this permit and as specified under the incorporated Attachment D - "Process Information." [KRS 224.46-530(1)(g)]
T-2	PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall not exceed the total permitted container capacity specified in this permit at any given time. [KRS 224.46-530(1)(g)]

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3STO2 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Management of Hazardous Waste in Containers:

Condition No.	Condition																				
T-3	PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall only store those hazardous wastes specified in this condition in the C-733, C-746-Q, C-746-A and C-752-A container storage areas:																				
	<table><tr><th>WASTE DESCRIPTION</th><th>HAZARDOUS WASTE NUMBER</th></tr><tr><td>Gold Dissolver Precipitate</td><td>D006, D008, D010</td></tr><tr><td>Miscellaneous flammable materials-liquids</td><td>D001, D00X, F00X, U00X</td></tr><tr><td>Miscellaneous flammable materials-solids</td><td>D001, D00X, F00X, U00X</td></tr><tr><td>Miscellaneous solutions exhibiting toxicity characteristics</td><td>D00X</td></tr><tr><td>Miscellaneous solids exhibiting toxicity characteristics</td><td>D00X</td></tr><tr><td>Discarded batteries</td><td>D00X</td></tr><tr><td>Liquids contaminated with spent solvents</td><td>D001, F001, F002, F003, F004, F005, U00X</td></tr><tr><td>Solids contaminated with spent solvents</td><td>F001, F002, F003, F004, F005, U00X</td></tr><tr><td>Waste Oils</td><td>D006, D008, F001, F002, F003, F004, F005</td></tr></table>	WASTE DESCRIPTION	HAZARDOUS WASTE NUMBER	Gold Dissolver Precipitate	D006, D008, D010	Miscellaneous flammable materials-liquids	D001, D00X, F00X, U00X	Miscellaneous flammable materials-solids	D001, D00X, F00X, U00X	Miscellaneous solutions exhibiting toxicity characteristics	D00X	Miscellaneous solids exhibiting toxicity characteristics	D00X	Discarded batteries	D00X	Liquids contaminated with spent solvents	D001, F001, F002, F003, F004, F005, U00X	Solids contaminated with spent solvents	F001, F002, F003, F004, F005, U00X	Waste Oils	D006, D008, F001, F002, F003, F004, F005
WASTE DESCRIPTION	HAZARDOUS WASTE NUMBER																				
Gold Dissolver Precipitate	D006, D008, D010																				
Miscellaneous flammable materials-liquids	D001, D00X, F00X, U00X																				
Miscellaneous flammable materials-solids	D001, D00X, F00X, U00X																				
Miscellaneous solutions exhibiting toxicity characteristics	D00X																				
Miscellaneous solids exhibiting toxicity characteristics	D00X																				
Discarded batteries	D00X																				
Liquids contaminated with spent solvents	D001, F001, F002, F003, F004, F005, U00X																				
Solids contaminated with spent solvents	F001, F002, F003, F004, F005, U00X																				
Waste Oils	D006, D008, F001, F002, F003, F004, F005																				

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T-4

PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall only store those hazardous wastes specified in this condition in the C-733, C-746-Q, C-746-A and C-752-A container storage areas: (continued)

WASTE DESCRIPTION (CONT'D)	HAZARDOUS WASTE NUMBER (CONT'D)
Miscellaneous materials, debris, and media containing spent solvents and metals - solids	D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F003, F004, F005, U00X
Miscellaneous laboratory wastes-liquids	D00X, F00X, U00X, P00X
Miscellaneous laboratory wastes-solids	D00X, F00X, U00X, P00X
Activated Carbon	D040, F00X, U00X
Equipment rinsates/decontamination wastes	D00X, F00X, U00X
Light bulbs	D006, D007, D008, D009
Sludges/scale	D00X, F00X, U00X
Compressed Gases	D003, D001
Fuses/Circuit Boards	D006, D008, D009, D011
Leachate	F039
Pentachlorophenol	F027

\*\*D00X - all waste codes identified in 401 KAR 31:030

F00X - all waste codes identified in 401 KAR 31:040, Section 2.

K00X - all waste codes identified in 401 KAR 31:040, Section 3.

P00X - all waste codes identified in 401 KAR 31:040, Section 4(5).

U00X - all waste codes identified in 401 KAR 31:040, Section 4(6).

[401 KAR 34:180]



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STO2 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Management of Hazardous Waste in Containers:

Condition No.	Condition
T-5	<p>PART II - Specific Conditions - Management of Hazardous Waste in Containers: The following restrictions apply regarding hazardous waste stored in containers:</p> <ul style="list-style-type: none"><li>·C-733 - All waste streams (listed in the condition immediately above) may be stored in this facility. The maximum container storage capacity is 38,500 gallons.</li><li>·C-746-Q - All waste streams (listed in the condition immediately above) may be stored in this facility except for D001. No ignitable wastes will be stored at C-746-Q. The maximum container storage capacity is 306,240 gallons.</li><li>·C-746-A - All waste streams (listed in the condition immediately above) may be stored in this facility except for flammable wastes with a flash point &lt; 100° F. Ignitable wastes may be stored at C-746-A with a flashpoint between 100° F and 140°F. The maximum container storage capacity is 561,440 gallons.</li><li>·C-752-A - All waste streams (listed in the condition immediately above) may be stored in this facility except for flammable wastes with a flash point &lt; 100° F. Ignitable wastes may be stored at C-752-A with a flashpoint between 100° F and 140°F. The maximum container storage capacity is 496,000 gallons.</li></ul> <p>. [KRS 224.46-530(1)(g)]</p>
T-6	<p>PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee may store containers of products or non-hazardous materials/waste in those container storage areas specifically identified in the condition immediately above that meet the following requirements: a) The Permittee shall conduct necessary testing and analysis in accordance with the incorporated Waste Analysis Plan, Attachment C in this permit, in order to ensure that materials stored in permitted container storage area(s) are compatible. b) The Permittee shall ensure that any products or non-hazardous wastes stored in a permitted container storage area are counted toward the total permitted container storage volume. The Permittee shall maintain daily inventories to ensure that permitted storage capacities are not exceeded. c) The Permittee shall comply with all applicable requirements of this permit while storing containers of products or non-hazardous materials/waste in permitted container storage area(s).</p> <p>. [KRS 224.46-530(1)(g), 49 CFR 178.Subpart L]</p>
T-7	<p>PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall comply with all requirements of the regulation(s) specified under this paragraph to ensure that all hazardous waste containers are in good condition. If a container holding hazardous waste is not in good condition (e.g. severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:180 Section 2]</p>
T-8	<p>PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall conduct necessary testing and analysis in accordance with the Waste Analysis Plan (Attachment C in this permit), in order to ensure that materials stored in permitted container storage area(s) are compatible. The containers used to store hazardous waste shall be made of or lined with compatible materials. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:180 Section 3]</p>

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GSTO2 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Management of Hazardous Waste in Containers:

Condition No.	Condition
T-9	PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall ensure that any products or non-hazardous wastes stored in a permitted container storage area are counted toward the total permitted container storage volume. The Permittee shall maintain inventories to ensure that permitted storage capacities are not exceeded. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:180]
T-10	PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall comply with all requirements of the specified regulation(s) to ensure that container(s) holding hazardous waste shall always be closed during storage except when it is necessary to add or remove waste. Roll off bin(s) that store debris must have fixed cover(s). Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:180 Section 4(1)]
T-11	PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall comply with all requirements of the specified regulation(s) to ensure that container(s) holding hazardous waste are not opened, handled, or stored in a manner which may rupture the container or cause it to leak. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:180 Section 4(2)]
T-12	PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall comply with all requirements of the specified regulation(s) to ensure that container(s) holding hazardous waste shall be labeled "Hazardous Waste" upon the date that hazardous waste is first added to the container. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:180 Section 4(3)]
T-13	PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall perform at least weekly inspections of the container storage area(s), and maintain the inspection forms in an operating log, where containers are stored, looking for leaking containers and for deterioration of containers and containment system caused by corrosion or other factors and inspection procedures in Attachment F - "Procedures to Prevent Hazards" of this permit. Containers shall not be stacked more than two high. The Permittee shall stage/store the containers so that the labels are fully visible and easy to inspect. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:180 Section 5 and 6]
T-14	PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall maintain the secondary containment system free of cracks and gaps, and ensure that the containment system is sufficiently impervious to contain leaks, spills, and accumulated precipitation. The containment system for the storage area(s) must have sufficient capacity as addressed in the "Process Information" (Attachment D) and "Procedures to Prevent Hazards" (Attachment F) incorporated in this permit. Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area(s) in as timely a manner as necessary to prevent overflow of the collection system. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:180 Section 6(2)]
T-15	PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall maintain the storage area(s) that store containers holding F020, F021, F022, F023, F026, and F027 (chlorinated dioxins, dibenzofurans, and phenols) that do not contain free liquids. These storage areas must have a containment system as described in 401 KAR 34:180 Section 6. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:180 Section 6(4), 401 KAR 34:180 Section 6(2)]

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GSTO2 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Management of Hazardous Waste in Containers:

Condition No.	Condition
T-16	<p>PART II - Specific Conditions - Management of Hazardous Waste in Containers: When storing ignitable or reactive wastes, the Permittee shall comply with the requirements listed in this condition. Any activity that requires compliance with 401 KAR 34:020, Sections 8(1) and (2) shall not be allowed without specific investigations and appropriate measures being taken to prevent fires and explosions. These investigations and preventive measures shall be documented and maintained in the Operating Record. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:180 Section 7, 401 KAR 34:020 Section 8]</p>
T-17	<p>PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee may install pressure relief devices within the bungs of containers to allow venting of gases or vapors which may cause the container to rupture or burst and present a health and safety concern. The Permittee shall maintain and inspect venting devices. All venting devices shall be fitted with appropriate filter(s) which shall remove or reduce hazardous constituents from released gases. Pressure relief devices may be installed on the containers which store the following types of hazardous wastes and any hazardous waste containers that contain wooden pallets, oil sludge or sump sludge:</p> <p>Tri-2-ethyl hexyl phosphate (TEHP) from laboratory operations, UF4 rust sludge from drum washing activities Alumigold Acidic Wastes</p> <p>Upon the determination that a container may be a threat to human health or the environment due to the accumulation of compressed gases resulting from a specific waste stream other than those referenced above, the Permittee may request the inclusion of these additional waste streams to be added to this permit. If the Permittee determines that a container poses an imminent and substantial endangerment and may rupture or burst due to an accumulation of compressed gases, the Permittee may request oral or written approval to install a venting device on the container(s). A written approval or denial by the Director for installation of a venting device on container(s) shall follow the Permittee request within seven (7) days. . [401 KAR 34:180]</p>
T-18	<p>PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall ensure compliance with the applicable regulation(s) specified in this condition and the incorporated attachments of this permit, "Procedures to Prevent Hazards" (Attachment F) and "Waste Analysis Plan" (Attachment C) when managing incompatible, ignitable, or reactive wastes at the facility. Based on the following regulation(s) effective 03/01/1983: [401 KAR 34:330 Section 1(1)]</p>

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3STO2 (continued):

### Narrative Requirements:

#### **PART II - Specific Conditions - Management of Hazardous Waste in Containers:**

Condition No.	Condition
T-19	PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall ensure that incompatible wastes or materials are not placed within the same container(s). The Permittee shall ensure that hazardous wastes are not placed in an unwashed container that previously held an incompatible waste or material. The Permittee shall ensure that containers holding hazardous wastes that are incompatible with other waste or materials stored nearby in other containers, piles, open tanks, or surface impoundments are separated from the other materials or are protected by a dike, berm, wall, or other device. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:180 Section 8, 401 KAR 34:180 Section 8(2), 401 KAR 34:180 Section 8(3)]
T-20	PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee at closure, shall remove all hazardous waste residues from the containment system. Remaining containers, liners, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues shall be decontaminated or removed from the facility in accordance with the Closure Plan, Attachment I to this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:180 Section 9]
T-21	PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall manage all hazardous waste placed in a container in accordance with the applicable requirements of 401 KAR 34:281. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:180 Section 10, 401 KAR 34:281]
T-22	PART II - Specific Conditions - Management of Hazardous Waste in Containers: The Permittee shall comply with all applicable regulation(s) specified in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:180, 401 KAR 38:150]

#### **PART II - Specific Conditions - Management of Hazardous Waste in Tanks:**

Condition No.	Condition
T-23	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall construct, operate, maintain, and inspect the tank system(s) specified in this permit and as specified in the incorporated attachments of this permit (See Attachment D - "Process Information"). [KRS 224.46-530(1)(g)]

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STO2 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Management of Hazardous Waste in Tanks:

Condition No.	Condition										
T-24	<p>PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee may store a total of twelve thousand (12,000) gallons of hazardous waste in four (4) tanks (Dimensions 8' dia X 11' 10", Capacity 3000 gallons) at C-733, pursuant to the terms of this section (Part II-Specific Conditions-Management of Hazardous Waste in Tanks) and as listed below. The Permittee shall not exceed the total permitted tank capacity specified in this condition at any given time.</p> <table><tr><th>WASTE DESCRIPTION(S)</th><th>HAZARDOUS WASTE NUMBER(S)</th></tr><tr><td>Miscellaneous solutions exhibiting toxicity characteristics</td><td>D00X</td></tr><tr><td>Liquids contaminated with spent solvents</td><td>F001, F002, F003, F004, F005, U00X</td></tr><tr><td>Miscellaneous solutions contaminated with spent solvents and metals</td><td>F001, F002, F003, F004, F005 D004, D005, D006, D007, D008 D009, D010, D011, U00X</td></tr><tr><td>Miscellaneous solutions (e.g. spills and releases) that are generated at the facility subject to the provisions of the PGDP Contingency Plan (Attachment G)</td><td>D00X, F00X, U00X, P00X</td></tr></table> <p>[KRS 224.46-530(1)(g)]</p>	WASTE DESCRIPTION(S)	HAZARDOUS WASTE NUMBER(S)	Miscellaneous solutions exhibiting toxicity characteristics	D00X	Liquids contaminated with spent solvents	F001, F002, F003, F004, F005, U00X	Miscellaneous solutions contaminated with spent solvents and metals	F001, F002, F003, F004, F005 D004, D005, D006, D007, D008 D009, D010, D011, U00X	Miscellaneous solutions (e.g. spills and releases) that are generated at the facility subject to the provisions of the PGDP Contingency Plan (Attachment G)	D00X, F00X, U00X, P00X
WASTE DESCRIPTION(S)	HAZARDOUS WASTE NUMBER(S)										
Miscellaneous solutions exhibiting toxicity characteristics	D00X										
Liquids contaminated with spent solvents	F001, F002, F003, F004, F005, U00X										
Miscellaneous solutions contaminated with spent solvents and metals	F001, F002, F003, F004, F005 D004, D005, D006, D007, D008 D009, D010, D011, U00X										
Miscellaneous solutions (e.g. spills and releases) that are generated at the facility subject to the provisions of the PGDP Contingency Plan (Attachment G)	D00X, F00X, U00X, P00X										
T-25	<p>PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall store and/or treat only those wastes which are compatible with the corrosive protection and the steel of the tanks. The Permittee is prohibited from storing or treating hazardous waste in tanks that is not identified in the condition immediately above. [KRS 224.46-530(1)(g)]</p>										
T-26	<p>PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall only manage those hazardous wastes specified in this section (Part II-Specific Conditions-Management of Hazardous Waste in Tanks) in the specified tank system(s) identified in Attachment D - "Process Information" of this permit. [KRS 224.46-530(1)(g)]</p>										

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3STO2 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Management of Hazardous Waste in Tanks:

Condition No.	Condition
T-27	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall maintain all tanks as required by 401 KAR 34:190, Sections 3 through 5, and as specified in the attached drawings in Attachment D of this permit. The shell thickness shall not be allowed to be less than the minimum as specified. A tank shall be replaced, repaired, or decommissioned if the minimum shell thickness is found to be less than that stated in drawings found in Attachment D of this permit. [401 KAR 34:190 Section 3, 4, and 5]
T-28	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: Prior to placing a new tank system or component (i.e., tank, secondary containment, etc.) in use, the Permittee shall have an independent, qualified professional engineer registered in the Commonwealth of Kentucky, or an independent qualified installation inspector (either of whom are trained and experienced in the proper installation of tank systems) inspect the tank system to assess any inadequate construction or damage which occurred during installation of the tank system or components. The Permittee shall remedy all discrepancies (e.g. structural damage or inadequate construction/installation) prior to placing the tank system in use as required by the specified regulation(s) in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 3(2), 40 CFR 260.11, 401 KAR 30:010 Section 3]
T-29	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall test all new tanks and ancillary equipment for tightness prior to placing these systems in use as required by the specified regulation(s) in this condition. If a tank system is found not to be tight, all repairs necessary to remedy the leak(s) in the system must be performed prior to the tank being placed in use. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 3(4 to 7), 40 CFR 260.11, 401 KAR 30:010 Section 3]
T-30	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall design, construct, install, and manage the tank secondary containment system(s) in accordance with the specified regulation(s) and Attachment D, incorporated as part of this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 4, 401 KAR 34:190 Section 5]
T-31	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall prevent overfilling of tanks as required by the specified regulation(s) and according to Attachment D and Attachment F of this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 5(2)]

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GSTO2 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Management of Hazardous Waste in Tanks:

Condition No.	Condition
T-32	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall comply with all requirements of the regulation(s) specified in this condition. The Permittee shall remedy any deterioration or malfunction discovered by an inspection. Records of inspection shall be kept as required by the specified regulation(s) and as follows: a) The Inspection Schedule included in the "Procedures to Prevent Hazards", incorporated as Attachment F to this permit. b) In addition to the above referenced Inspection Schedule, the Permittee shall record all inspections in the inspection log format included in the referenced attachment. c) At a minimum the Permittee shall inspect the following components of the tank system at least once each operating day: i) Above ground portions of the tank system to detect corrosion or releases of waste; ii) Data gathered from monitoring and leak detection equipment to ensure that the tank system is being operated according to its design; and iii) Construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system, to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation, etc.). Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 6, 401 KAR 34:020 Section 6]
T-33	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall report to the Hazardous Waste Branch Manager within 24 hours of detection: the detection of a release when a leak or spill occurs from the tank system or secondary containment system to the environment as required by the regulation(s) specified in this condition. A leak or spill of one pound or less of hazardous waste, that is immediately contained and cleaned up, need not be reported as specified in the referenced regulation(s). If the Permittee has reported the release pursuant to KRS 224.01-400, this report satisfies the requirements of this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 7(4)(a)]." [401 KAR 34:190 Section 7]
T-34	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: Within 30 days of detecting a release to the environment from the tank system or secondary containment system, the Permittee shall report the following information to the Hazardous Waste Branch Manager pursuant to the specified regulation(s) in this condition: i) Likely route of migration of the release; ii) Characteristics of the surrounding soil (including soil composition, geology, hydrogeology, and climate); iii) Results of any monitoring or sampling conducted in connection with the release. If the Permittee finds it will be impossible to meet this time period, the Permittee should provide the Hazardous Waste Branch Manager with a schedule of when the results will be available. This schedule must be provided before the required thirty (30) day submittal period expires; iv) Proximity of down gradient drinking water, surface water, and populated areas; and v) Description of response action taken or planned. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 7(4)(c)]
T-35	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall submit to the Hazardous Waste Branch Manager all certifications of major repairs to correct the leaks within seven days from returning the tank system to use as required in the specified regulation(s) in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 7(4)]
T-36	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall obtain, and keep on file at the facility, the written statements by those persons required to certify the design and installation of the tank system pursuant to the specified regulation(s) in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 7(4)]

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GSTO2 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Management of Hazardous Waste in Tanks:

Condition No.	Condition
T-37	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall keep on file at the facility the written assessment of the integrity of the tank system as required in the specified regulation(s) in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 7(4)]
T-38	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: At closure of a tank system, the Permittee shall comply with the applicable requirements of the specified regulation(s) in this condition, the incorporated "Closure Plan" (Attachment I ) in this permit, and shall remove or decontaminate all waste residues, contaminated containment system components (for example liners), contaminated soils, and structures and equipment contaminated with waste; and manage them as hazardous waste, unless Section 3(4) of 401 KAR 31:010 applies. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 8]
T-39	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall not place any ignitable or reactive waste in the tank system(s) unless the procedures described in 401 KAR 34:190, Section 9 are followed. Compliance with these requirements shall be documented through Attachment C - "Waste Analysis Plan" and Attachment D - "Process Information". Any activity that requires compliance with 401 KAR 34:020, Section 8(1) and 8(2) shall not be allowed except in accordance with Attachment D. The measures taken to comply shall be noted in the Operating Record required in Part II - Record Keeping and Reporting of this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 9, 401 KAR 34:020 Section 8(1 and 2)]
T-40	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee, where ignitable or reactive waste is stored or treated in a tank system, shall maintain a buffer zone in accordance with the requirements of the specified regulation(s) and as specified in the "Waste Analysis Plan" (Attachment C), "Process Information" (Attachment D), and "Procedures to Prevent Hazards" (Attachment F) incorporated and attached to this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 9(2), 40 CFR 260.11, 401 KAR 30:010 Section 3, 401 KAR 34:190 Section 10]
T-41	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee, when managing incompatible wastes, shall comply with all requirements of the specified regulation(s) in this condition and the following: (1) Incompatible wastes, or incompatible wastes and materials, shall not be placed in the same tank system unless Section 8(2) of 401 KAR 34:020 is complied with. (2) Hazardous waste shall not be placed in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless Section 8(2) of 401 KAR 34:020 is complied with. Compliance with these requirements shall be documented in accordance with "Waste Analysis Plan" (Attachment C) and "Procedures to Prevent Hazards" (Attachment F) incorporated in this permit. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 10, 401 KAR 34:020 Section 8(2)]
T-42	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall manage all hazardous wastes placed in a tank system in accordance with the requirements of the specified regulation(s) in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190 Section 11, 401 KAR 34:281]

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GSTO2 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Management of Hazardous Waste in Tanks:

Condition No.	Condition
T-43	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The storage of hazardous wastes restricted from land disposal under 401 KAR Chapter 37 is prohibited unless the requirements of the regulation(s) specified in this condition are met. Based on the following regulation(s) effective 3/12/1997: [401 KAR 37:050 Section 1]
T-44	PART II - Specific Conditions - Management of Hazardous Waste in Tanks: The Permittee shall comply with all applicable regulation(s) specified in this condition. Based on the following regulation(s) effective 3/12/1997: [401 KAR 34:190, 401 KAR 38:160]

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### GSTR2 (Monitoring Wells) Monitoring wells for C-404 Landfill.:

#### Narrative Requirements:

##### PART II - Specific Conditions - Detection Monitoring Program - Well Location and Construction:

Condition No.	Condition
T-1	PART II - Specific Conditions - Detection Monitoring Program - Well Location and Construction: The Permittee shall maintain a groundwater monitoring program for the landbased unit referred to as the C-404 Hazardous Waste Landfill. This unit was closed as a landfill in May 1986. This permit and the associated approved permit application shall replace any and all groundwater monitoring requirements approved in the closure plan. The C-404 Hazardous Waste Landfill is in a Detection Monitoring Program. This is the only unit subject to the groundwater requirements specified. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 9]
T-2	PART II - Specific Conditions - Detection Monitoring Program - Well Location and Construction: The Permittee shall maintain a groundwater monitoring system to comply with the requirements of this permit. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 9, 401 KAR 34:060 Section 8(1),(2),(3)]
T-3	PART II - Specific Conditions - Detection Monitoring Program - Well Location and Construction: The Permittee shall maintain a groundwater monitoring system for the uppermost aquifer and the Upper Continental Recharge System (UCRS) that complies with the requirements of the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 6, 401 KAR 34:060 Section 8]
T-4	PART II - Specific Conditions - Detection Monitoring Program - Well Location and Construction: The Permittee shall maintain the groundwater wells listed below at the locations identified in Figure 3 of the incorporated Attachment E - "Groundwater Monitoring" of this permit. The upgradient/background wells consist of the following:

Downgradient			Upgradient		
Upper RGA	Lower RGA	UCRS	Upper RGA	Lower RGA	UCRS
MW-84	MW-86	MW-85	MW-93	MW-95A	MW-94
MW-87	MW-89	MW-88	MW-227	MW-226	
MW-90A	MW-92	MW-91			

Based on the following regulation(s) effective 03/12/1997: [401 KAR 6:310], [401 KAR 34:060 Section 8]

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GSTR2 (continued):

### Narrative Requirements:

#### **PART II - Specific Conditions - Detection Monitoring Program - Point of Compliance:**

Condition No.	Condition
T-5	PART II - Specific Conditions - Detection Monitoring Program - Point of Compliance: The Permittee shall determine whether any concentration limits for any constituents (listed in Part II-Specific Conditions-Detection Monitoring Program-Sampling and analysis Procedures) are being exceeded at any monitoring well at the point of compliance. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 9]
T-6	PART II - Specific Conditions - Detection Monitoring Program - Point of Compliance: The Permittee shall assure that the hazardous constituents identified in Attachment E - "Groundwater Monitoring" do not exceed the concentration limits identified in Attachment E at or beyond the point of compliance wells during the term of this permit. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 3]
T-7	PART II - Specific Conditions - Detection Monitoring Program - Point of Compliance: The point of compliance consists of the following downgradient wells identified in Attachment E - "Groundwater Monitoring": MW84, MW86, MW87, MW89, MW90A, MW92. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 6]
T-8	PART II - Specific Conditions - Detection Monitoring Program - Point of Compliance: The upgradient monitoring wells shall be used to determine background concentrations given in this permit. These monitoring wells are designated as MW93, MW95A, MW226, and MW 227. [401 KAR 34:060 Section 6 and 8]
T-9	PART II - Specific Conditions - Detection Monitoring Program - Point of Compliance: All wells deleted from the compliance monitoring program and sub-standard RCRA monitoring wells not in use shall be plugged and abandoned in accordance with Attachment E - "Groundwater Monitoring" of this permit. Approval of an alternate method for well decommissioning may be approved by the Hazardous Waste Branch Manager. Well plugging and abandonment methods and certification shall be submitted to the Hazardous Waste Branch Manager within thirty (30) days from the date the wells are removed from the monitoring program. [401 KAR 34:060 Section 6 and 8]
T-10	PART II - Specific Conditions - Detection Monitoring Program - Point of Compliance: The Permittee shall install replacement wells for any well listed in this permit which no longer meets the requirements in 401 KAR 34:060, Section 8. All replacement wells shall be designated by the letter "A" preceding the well number. In the event that an "A" series well is deleted from the monitoring system, the replacement well shall be designated as a "B" series and follows C, D, E, etc. for any individual monitoring well which is replaced. [401 KAR 34:060 Section 8]
T-11	PART II - Specific Conditions - Detection Monitoring Program - Point of Compliance: The Permittee shall submit a plan to the Hazardous Waste Branch Manager for installation of any replacement monitoring wells. The plan shall be submitted within thirty (30) days from the date the replacement well is proposed to be installed. The plan shall consist of the following items: a) Exact locations(s) of each proposed monitoring well(s); b) Methods and equipment which will be used to install the proposed monitoring well(s); c) Materials and construction details of each monitoring well; d) The proposed methods for developing newly installed wells; e) Schedules for installation and development.

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GSTR2 (continued):

### Narrative Requirements:

#### **PART II - Specific Conditions - Detection Monitoring Program - Point of Compliance:**

Condition No.	Condition
T-12	PART II - Specific Conditions - Detection Monitoring Program - Point of Compliance: The Permittee shall submit to the Hazardous Waste Branch Manager a report of the surveyed elevation and the well construction details and specifications upon completion of any new well installation. [401 KAR 34:060 Section 8]
T-13	PART II - Specific Conditions - Detection Monitoring Program - Point of Compliance: The Permittee shall monitor all wells listed in the above permit condition for the parameters and constituents listed in Attachment E - "Groundwater Monitoring" included in this permit.
T-14	PART II - Specific Conditions - Detection Monitoring Program - Point of Compliance: Background concentration shall be established from all upgradient monitoring wells listed in this permit for the constituents listed in Attachment E. The background data shall be based on one complete year of current data. The initial background concentration shall be based on four (4) consecutive quarters of data. Subsequent background values shall be calculated continuously (rolling average) on a semi-annual basis. [401 KAR 34:060 Section 9(3)(a)]

#### **PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures:**

Condition No.	Condition
T-15	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: When obtaining samples from the groundwater monitoring wells described in this permit, the Permittee shall use the techniques and procedures described in the incorporated in the "Groundwater Monitoring" Attachment (E) of this permit and in the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8(4)]
T-16	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: Protective disposable gloves shall be utilized during all groundwater sampling activities. A clean pair of gloves shall be worn at each sample location. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8]
T-17	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: Water level measurements shall be taken in the monitoring wells, prior to any purging or collection of samples. The depth to groundwater measurement shall be made to an accuracy of 0.01 feet using an electric water level indicator. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8(6)]
T-18	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: Water level measurements shall be made from the designated reference point at each well. The reference point shall be maintained as part of the recordkeeping requirements of this permit. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8(6)]

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**GSTR2 (continued):**

### Narrative Requirements:

#### **PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures:**

Condition No.	Condition
T-19	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: Wells shall be purged at rates specified in Attachment E until all field parameters stabilize indicating that formation water is being evacuated. Results for the field tests shall be recorded on the groundwater sampling record. The purge water and any other water drawn from a well for field testing shall be properly disposed. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8]
T-20	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: Samples shall be taken at an interval that assures, to the greatest extent technically feasible, that an independent sample is obtained. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8(7)]
T-21	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: The Hazardous Waste Branch Manager may specify the frequencies for collecting samples and conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with the regulation(s) specified in this condition. One (1) sample from each well (background and compliance wells) shall be collected at least semiannually during the compliance period of the unit(s). Based on the following regulation(s) effective on 3/12/97. [401 KAR 34:060 Section 9(4), 401 KAR 34:060 Section 8(7)]
T-22	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: Sample containers shall be constructed of a material compatible and non-reactive with the material it is to contain and meet the appropriate general performance standards as detailed in Attachment E. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8]
T-23	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: If a preservative is added to a sample, it shall be noted on the sample label and the sampling record. Samples shall be preserved in accordance with the procedures included in Attachment E. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8]
T-24	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: The Permittee shall develop a field blank by filling the appropriate sample containers from the field supply of ASTM Type I organic free water (or equivalent). This field supply water shall be the same water used for cleaning and decontamination of all equipment used for purging and sampling. Field blanks shall be taken and analyzed for each sampling event at a minimum of one (1) in every twenty (20) samples per monitoring event. Upon Cabinet approval, the Permittee may use a trip blank in lieu of a field blank. In such cases, the same procedures shall be followed, except that the containers are to be filled in the laboratory instead of in the field. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8]

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### Narrative Requirements:

#### PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures:

Condition No.	Condition
T-25	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: The Permittee shall develop an equipment (rinsate) blank in the field immediately following cleaning and decontamination procedures on any non-dedicated equipment used for purging or sampling by passing field supply ASTM Type I organic free water (or equivalent) through the non-dedicated equipment in the same procedure as a groundwater sample. Equipment blanks shall be taken and analyzed any time non-dedicated sampling equipment is used or when new equipment is being dedicated to a well. Such blanks shall be taken at a minimum of one (1) in every twenty (20) samples per monitoring event. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8]
T-26	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: The Permittee shall develop a trip blank prior to each sampling event. The trip blank shall consist of a sealed organic sample container filled with deionized, distilled, laboratory-certified ultrapure water or with prior approval from the Division, equivalent water specifications can be used. The trip blank shall accompany the sample containers for volatile organics and be analyzed for organics identified in this permit. [401 KAR 34:060 Section 8]
T-27	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: At least one (1) duplicate sample shall be collected and analyzed according to the procedures specified in this permit each time the groundwater quality is determined at the compliance point. [401 KAR 34:060 Section 8]
T-28	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: Samples shall be withdrawn from each monitoring well listed in Part II-Specific Conditions-Detection Monitoring Program-Well Location and Construction, during each sampling event and field tested for temperature, pH, and specific conductance. Results from the field tests shall be recorded in the groundwater sampling records log and the sample properly disposed. [401 KAR 34:060 Section 8]
T-29	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: Samples shall be withdrawn in the following order: 1) Samples to be analyzed for volatile organics; 2) Samples to be analyzed for total metals. [401 KAR 34:060 Section 8]
T-30	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: The analytical laboratory shall also report spike recovery data for each series of groundwater samples collected. [401 KAR 34:060 Section 8]
T-31	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: A groundwater sampling record shall be completed for each sample location during all groundwater monitoring events. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8]
T-32	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: Samples shall be tracked and controlled using the chain of custody procedures specified in Attachment E. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8(4)(d)]

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### GSTR2 (continued):

#### Narrative Requirements:

#### PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures:

Condition No.	Condition																
T-33	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: Samples shall be preserved and shipped in accordance with the procedures specified in this permit. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8]																
T-34	<p>PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: Samples shall be analyzed in accordance with SW-846 "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods". Alternative SW-846 methods may be substituted with prior written approval from the Division. The required specific test methods for the above specified constituents are identified below:</p> <table><tr><th>HAZARDOUS CONSTITUENT</th><th>SW-846 SAMPLE METHODS</th></tr><tr><td>Trichloroethylene</td><td>8010, 8240, 8260</td></tr><tr><td>Arsenic</td><td>7060, 7061, 6020</td></tr><tr><td>Cadmium</td><td>7130, 7131, 6010, 6020</td></tr><tr><td>Chromium</td><td>7190, 7191, 6010, 6020</td></tr><tr><td>Lead</td><td>7421, 6010, 6020</td></tr><tr><td>Selenium</td><td>7740, 7741, 6010, 6020</td></tr><tr><td>Mercury</td><td>7470, 6010, 6020</td></tr></table> <p>*These parameters shall be analyzed in accordance with conditions outlined in this permit. Based on the following regulation(s) effective 03/12/1997: [401 KAR 30:010 Section 3(1)]</p>	HAZARDOUS CONSTITUENT	SW-846 SAMPLE METHODS	Trichloroethylene	8010, 8240, 8260	Arsenic	7060, 7061, 6020	Cadmium	7130, 7131, 6010, 6020	Chromium	7190, 7191, 6010, 6020	Lead	7421, 6010, 6020	Selenium	7740, 7741, 6010, 6020	Mercury	7470, 6010, 6020
HAZARDOUS CONSTITUENT	SW-846 SAMPLE METHODS																
Trichloroethylene	8010, 8240, 8260																
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Chromium	7190, 7191, 6010, 6020																
Lead	7421, 6010, 6020																
Selenium	7740, 7741, 6010, 6020																
Mercury	7470, 6010, 6020																
T-35	<p>PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: The following radionuclide sampling procedures have been approved:</p> <table><tr><th>RADIONUCLIDE</th><th>METHOD/INSTRUMENTATION</th></tr><tr><td>Technetium 99</td><td>Liquid Scintillation</td></tr><tr><td>Total Uranium</td><td>6010, 6020</td></tr><tr><td>Uranium 234</td><td>Alpha Spectroscopy/Gamma Spectroscopy</td></tr><tr><td>Uranium 235</td><td>Alpha Spectroscopy/Gamma Spectroscopy</td></tr><tr><td>Uranium 238</td><td>Alpha Spectroscopy/Gamma Spectroscopy</td></tr></table>	RADIONUCLIDE	METHOD/INSTRUMENTATION	Technetium 99	Liquid Scintillation	Total Uranium	6010, 6020	Uranium 234	Alpha Spectroscopy/Gamma Spectroscopy	Uranium 235	Alpha Spectroscopy/Gamma Spectroscopy	Uranium 238	Alpha Spectroscopy/Gamma Spectroscopy				
RADIONUCLIDE	METHOD/INSTRUMENTATION																
Technetium 99	Liquid Scintillation																
Total Uranium	6010, 6020																
Uranium 234	Alpha Spectroscopy/Gamma Spectroscopy																
Uranium 235	Alpha Spectroscopy/Gamma Spectroscopy																
Uranium 238	Alpha Spectroscopy/Gamma Spectroscopy																

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GSTR2 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures:

Condition No.	Condition
T-36	PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures: The Permittee shall determine the groundwater surface elevation at each well, each time groundwater is sampled, as described in this paragraph. The Permittee shall record the surveyed elevation of the monitoring well(s) when installed to determine the groundwater elevation in accordance with this paragraph. [401 KAR 34:060 Section 8(6)]

#### PART II - Specific Conditions - Detection Monitoring Program - Monitoring Program and Data Evaluation:

Condition No.	Condition
T-37	PART II - Specific Conditions - Detection Monitoring Program - Monitoring Program and Data Evaluation: The Permittee shall, in accordance with this condition, submit annual groundwater flow rate and direction by November 30 of each year of the post-closure period as specified in this permit. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 9(5)]
T-38	PART II - Specific Conditions - Detection Monitoring Program - Monitoring Program and Data Evaluation: The Permittee shall analyze for those indicator parameters listed in PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures of this permit throughout the post-closure period. These determinations shall be made semi-annually, from at least one (1) sample for each monitoring well listed in the permit. [401 KAR 34:060 Section 8(7), 401 KAR 34:060 Section 9(4)]
T-39	PART II - Specific Conditions - Detection Monitoring Program - Monitoring Program and Data Evaluation: The Permittee shall monitor for all hazardous constituents listed in PART II - Specific Conditions - Detection Monitoring Program - Sampling and Analysis Procedures of this permit during the compliance period. The compliance period is the number of years equal to the active life of the waste management area including any waste management activity prior to issuance of the post-closure Permit. The compliance period is forty (40) years. The compliance period began with the initial groundwater monitoring event on October 11, 1988 and will end on October 11, 2028 (unless the C-404 Hazardous Waste Landfill has moved into a Corrective Action Program under 401 KAR 34:060 Section 11). [401 KAR 34:060 Section 7]



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GSTR2 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Detection Monitoring Program - Statistical Evaluation:

Condition No.	Condition
T-40	PART II - Specific Conditions - Detection Monitoring Program - Statistical Evaluation: The determination of groundwater quality required in this permit shall consist of calculating whether there is a statistically significant increase in concentration of any constituents identified in Attachment E at any of the compliance wells over the background value for that constituent. The procedures outline in Attachment E satisfies the requirements of 401 KAR 34:060, Section 2. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8]
T-41	PART II - Specific Conditions - Detection Monitoring Program - Statistical Evaluation: The Permittee shall determine whether there is statistically significant evidence of increased contamination for any chemical parameter or hazardous constituent specified in Attachment E of this permit. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 9(6 and 7)]
T-42	PART II - Specific Conditions - Detection Monitoring Program - Statistical Evaluation: In determining whether statistically significant evidence of increased contamination exists, the Permittee shall use the method(s) specified in this permit under Section 8(8) of this administrative regulation and in Attachment E of this permit. The method(s) shall compare data collected at the compliance point(s) to a concentration limit developed in accordance with this administrative regulation. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 8(8)]
T-43	PART II - Specific Conditions - Detection Monitoring Program - Statistical Evaluation: The Permittee shall determine whether there is statistically significant evidence of increased contamination at each monitoring well at the compliance point within a reasonable time period after completion of sampling. The Permittee must complete the statistical evaluation and provide a report to the Hazardous Waste Branch Manager within thirty (30) days of completion of data validation. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 9(6)(b)]

#### PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response:

Condition No.	Condition
T-44	PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response: If the Permittee determines, pursuant to the permit and this condition, that there has been a confirmed statistically significant increase from the background values for the constituents specified in the permit, the Permittee shall notify the Hazardous Waste Branch Manager in writing within seven (7) days. The Permittee shall specify what concentration limits have been exceeded. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 9(7)(a), 401 KAR 34:060 Section 10(9)(a)]

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**GSTR2 (continued):**

### Narrative Requirements:

#### **PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response:**

Condition No.	Condition
T-45	PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response: The data from the compliance wells shall be compared to the data from the upgradient/background wells to determine whether there is a statistically significant evidence of contamination. The comparison shall be performed in accordance with the requirements of the regulation(s) specified in this condition and in EPA's "Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities - Interim Final Guidance," April 1989 and the "Addendum to Interim Final Guidance," July 1992 or to any such revisions to this document. The Permittee shall utilize the statistical methods specified in Attachment E in evaluating groundwater monitoring data, in accordance with the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8(8),(9)]
T-46	PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response: The Permittee shall enter all monitoring, testing, and analytical data obtained in the operating record. The data must include all computations, calculated means, variances, and results of the statistical tests as required by this permit. [401 KAR 34:050 Section 4(2)(f)]
T-47	PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response: The Permittee shall submit the analytical and statistical results required by this permit in accordance with the schedule shown below:  Sample Collection Month:                      Result Due Date:  January - March                                      May 30 July - September                                      November 30.
T-48	PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response: The Permittee shall record groundwater analytical data as measured and in a form necessary for the determination of statistical significance under the specified regulation(s) in this condition during the compliance period of the facility. Based on the following regulation(s) effective on 3/12/97: [401 KAR 34:060 Section 8(7), 401 KAR 34:060 Section 8(11)]
T-49	PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response: If the Permittee determines, pursuant to Part II-Detection Monitoring Program-Sampling and Analysis Procedures of this permit, that there has been a confirmed statistically significant increase from the background values for the constituents specified in the permit, the Permittee shall immediately resample the groundwater in all wells identified in this permit and determine the concentration of all constituents identified in 401 KAR 34:060, Section 1, as required by 401 KAR 34:060, Sections 9(8)(b) and 10. If a statistically significant increase is confirmed for Technetium-99 or Total Uranium in any well identified in Part II-Detection Monitoring Program-Well Location and Construction of this permit, the Permittee shall immediately resample the groundwater in all wells for Technetium-99, Uranium-234, Uranium 235, and Uranium-238. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 9(8)(b), 401 KAR 34:060 Section 10, 401 KAR 34:060 Section 1]

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**GSTR2 (continued):**

### Narrative Requirements:

#### **PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response:**

Condition No.	Condition
T-50	PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response: If the Permittee determines, pursuant to Part II-Detection Monitoring Program-Sampling and Analysis Procedures of this permit, that there has been a confirmed statistically significant increase from the background values for the constituents specified in the permit, the Permittee shall establish background values for each constituent identified in the following regulation(s) (effective 03/12/1997) found in the groundwater. The background data shall be based on one complete year of current data. The initial background concentration shall be based on four (4) consecutive quarters of data pursuant to 401 KAR 34:060, Section 8(7)(a). Subsequent background values shall be calculated continuously (rolling average) on a semi-annual basis. [401 KAR 34:060 Section 9, 401 KAR 34:060 Section 8]
T-51	PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response: The Permittee shall enter all groundwater monitoring, testing, and analytical data obtained into the operating record. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:050 Section 4]
T-52	PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response: For any 401 KAR 34:360 compounds found in the analysis, the Permittee may resample within one (1) month and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents shall form the basis for compliance monitoring. If the Permittee does not resample for the compounds, the hazardous constituents found during this initial 401 KAR 34:360 analysis shall form the basis for compliance monitoring; [401 KAR 34:060 Section 9(7)(c)]
T-53	PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response: The Permittee shall submit all groundwater monitoring, testing, and analytical data obtained pursuant to the permit to the Manager of the Hazardous Waste Branch (herein after referred to as "Branch Manager" or "Manager") in accordance with PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response of this permit. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 8]
T-54	PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response: If the Permittee determines, pursuant to Part II-Specific Conditions-Detection Monitoring Program-Sampling and Analysis Procedures of this permit, that there has been a confirmed statistically significant increase from the background values for the constituents specified in the permit, the Permittee shall submit to the Hazardous Waste Branch Manager, within ninety (90) days, an application for a permit modification to establish a compliance monitoring program meeting the requirements of the specified regulation(s) in this condition. If Technetium-99 or Total Uranium has a confirmed statistically significant increase, the Permittee shall establish a compliance monitoring program consistent with Attachment E (Groundwater Monitoring), Part 8. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 10, 401 KAR 34:060 Section 9]

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### GSTR2 (continued):

#### Narrative Requirements:

##### **PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response:**

Condition No.	Condition
T-55	PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response: If the Permittee determines that there has been a confirmed statistically significant increase from the background values for the constituents specified in Part II-Specific Conditions-Detection Monitoring Program-Sampling and Analysis Procedures of this permit, the Permittee shall submit to the Hazardous Waste Branch Manager, within 180 days, an engineering feasibility plan for a corrective action program, except as provided in the regulations. This condition is not applicable when a statistically significant increase has been confirmed for Technetium-99, Total Uranium, Uranium-234, Uranium-235, or Uranium 238. Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 9]
T-56	PART II - Specific Conditions - Detection Monitoring Program - Recordkeeping, Reporting and Response: If the Permittee determines that there is a statistically significant increase at the compliance point for the parameters and constituents specified in this permit, the Permittee may within ninety (90) days demonstrate that a source other than a regulated unit caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation in accordance with the conditions of this paragraph. [401 KAR 34:060 Section 9]

##### **PART II - Specific Conditions - Detection Monitoring Program - Source Demonstration or Error in Data:**

Condition No.	Condition
T-57	PART II - Specific Conditions - Detection Monitoring Program - Source Demonstration or Error in Data: The Permittee may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater. In such case, the Permittee shall notify the Hazardous Waste Branch Manager in writing within seven (7) days that he intends to make a demonstration, and shall, within ninety (90) days, submit a report to the Hazardous Waste Branch Manager which demonstrates that a source other than the regulated unit caused the increase or that the increase resulted from error in sampling, analysis, or evaluation. If warranted, the Permittee may request a permit modification in accordance with the procedures in the specified regulation(s). Based on the following regulation(s) effective 03/12/1997: [401 KAR 34:060 Section 9(7)(f), 401 KAR 38:040]

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GSTR2 (continued):

### Narrative Requirements:

#### PART II - Specific Conditions - Detection Monitoring Program - Permit Modification:

Condition No.	Condition
T-58	PART II - Specific Conditions - Detection Monitoring Program - Permit Modification: If the Permittee determines that the monitoring program required by this permit no longer satisfies the requirements of the regulations, the Permittee must submit an application for a permit modification to make any appropriate changes to the program which will satisfy the regulations. [401 KAR 34:060 Section 9]
T-59	PART II - Specific Conditions - Detection Monitoring Program - Permit Modification: The Permittee shall be subject to applicable modification fees. Based on the following regulation(s) effective 03/12/1997: [KRS 224.46-018, 401 KAR 39:120]

#### PART II - Specific Conditions - Detection Monitoring Program - Duty of Permittee:

Condition No.	Condition
T-60	PART II - Specific Conditions - Detection Monitoring Program - Duty of Permittee: The Permittee must assure that monitoring and interim corrective action measures necessary to achieve compliance with the groundwater protection standard are taken during the term of this permit. [401 KAR 34:060 Section 9]

The following changes were made to update the various Solid Waste Management Unit (SWMU) and Area of Concern (AOC) Tables from Appendix A. These tables were last updated in the Renewal Permit (issued September 30, 2004 with an effective date of October 31, 2004). Typographical errors were corrected as identified.

### **Appendix A-1**

#### **Solid Waste Management Units and Areas of Concern Requiring an RFI**

##### **Added the following SWMUs to Appendix A-1:**

SWMU 8 C-746-K Inactive Sanitary Landfill (*WAG 1 & 7 ROD: 2/98*)

SWMU 59 N-S Diversion Ditch (Inside Plant Security Area) (*IRA at the N-S Diversion Ditch ROD: 8/02*)

SWMU 91 UF<sub>6</sub> Cylinder Drop Test Pit (*Remedial Action at SWMU 91, WAG 27 ROD: 7/98*)

SWMU 100 Fire Training Area (*WAG 1 & 7 ROD: 2/98*)

SWMU 463 C-746-A East End Smelter (by KDWM letter dated 8/30/07)

SWMU 464 C-746-A West End Smelter (by KDWM letter dated 8/30/07)

Note: Adding SWMU 59 N-S Diversion Ditch (Inside Plant Security Area) to Appendix A-1 corrects an oversight from the Renewal.

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The Description of SWMU 154 was changed from "C-331 PCB Soil Contamination (Southwest)" to "C-331 PCB Soil Contamination (Southeast)" to correct a typographical error.

The Description of SWMU 210 was changed from "Southeast Groundwater Plume" to "Southwest Groundwater Plume" to correct a typographical error.

The Description of SWMU 212 was changed from "C-745-B Radiological Contamination Area" to "C-745-A Radiological Contamination Area" to correct a typographical error.

Spaces were added to the descriptions of SWMUs 498, 499, 500, 510 and 511 to correct typographical errors.

## **Appendix A-2**

### **Solid Waste Management Units and Areas of Concern that Require No Further Action at this Time**

Added the following SWMUs to Appendix A-2:

SWMU 360 C-535 (by KDWM letter dated 1/4/06)  
SWMU 361 C-727-90-Day Area (by KDWM letter dated 8/28/07)  
SWMU 362 G-310-04 (by KDWM letter dated 8/28/07)  
SWMU 364 G-331-05 (by KDWM letter dated 6/29/04)  
SWMU 368 G-333-08 (by KDWM letter dated 6/29/04)  
SWMU 371 G-335-01 (by KDWM letter dated 1/4/06)  
SWMU 377 G-337-22 (by KDWM letter dated 1/4/06)  
SWMU 382 G-340-06 (by KDWM letter dated 8/28/07)  
SWMU 386 G-410-01 (by KDWM letter dated 8/28/07)  
SWMU 387 G-416-01 (by KDWM letter dated 8/28/07)  
SWMU 389 G-533-01 (by KDWM letter dated 6/29/04)  
SWMU 390 G-535-02 (by KDWM letter dated 6/29/04)  
SWMU 391 G-537-01 (by KDWM letter dated 1/4/06)  
SWMU 392 G-540-A-01 (by KDWM letter dated 2/14/06)  
SWMU 393 G-540-A-1-02 (by KDWM letter dated 2/14/06)  
SWMU 395 G-600-01 (by KDWM letter dated 3/8/07)  
SWMU 396 G-611-U-01 (by KDWM letter dated 3/8/07)  
SWMU 397 G-612-01 (by KDWM letter dated 3/8/07)  
SWMU 398 G-612-02 (by KDWM letter dated 3/8/07)  
SWMU 399 G-612-A-01 (by KDWM letter dated 3/8/07)  
SWMU 400 G-635-01 (by KDWM letter dated 3/8/07)  
SWMU 401 G-710 (by KDWM letter dated 1/4/06)  
SWMU 403 G-710-20 (by KDWM letter dated 1/4/06)  
SWMU 405 G-720-22 (by KDWM letter dated 2/14/06)  
SWMU 406 G-743-T-17-01 (by KDWM letter dated 6/29/04)  
SWMU 407 G-743-T-17-02 (by KDWM letter dated 3/8/07)  
SWMU 408 G-745-B-01 (by KDWM letter dated 3/8/07)

SWMU 409 G-745-T-01 (by KDWM letter dated 2/14/06)  
SWMU 410 G-746-G-01 (by KDWM letter dated 6/29/04)  
SWMU 411 G-746-G-1-01 (by KDWM letter dated 3/8/07)  
SWMU 412 G-746-G-2-01 (by KDWM letter dated 11/1/04)  
SWMU 413 G-746-G-3-01 (by KDWM letter dated 11/1/04)  
SWMU 414 G-746-F-01 (by KDWM letter dated 1/4/06)  
SWMU 415 G-746-S-01 (by KDWM letter dated 8/28/07)  
SWMU 416 G-746-X-01 (PCBs) (by KDWM letter dated 3/8/07)  
SWMU 417 G-746-X-01 (Asbestos) (by KDWM letter dated 3/8/07)  
SWMU 418 G-748-B-01 (by KDWM letter dated 6/30/04)  
SWMU 419 G-752-C-01 (by KDWM letter dated 8/28/07)  
SWMU 420 G-752-C-02 (by KDWM letter dated 3/8/07)  
SWMU 421 G-754-01 (by KDWM letter dated 1/4/06)  
SWMU 429 S-310-04 (by KDWM letter dated 8/28/07)  
SWMU 430 S-331-02 (by KDWM letter dated 1/4/06)  
SWMU 432 S-335-09 (by KDWM letter dated 1/4/06)  
SWMU 440 S-410-05 (by KDWM letter dated 8/28/07)  
SWMU 441 S-540-A-2-01 (by KDWM letter dated 6/30/04)  
SWMU 442 S-612-01 (by KDWM letter dated 2/14/06)  
SWMU 443 S-709-01 (by KDWM letter dated 6/30/04)  
SWMU 444 S-709-02 (by KDWM letter dated 6/30/04)  
SWMU 445 S-710-05 (by KDWM letter dated 2/14/06)  
SWMU 447 S-710-09 (by KDWM letter dated 9/11/03)  
SWMU 450 S-710-32 (by KDWM letter dated 1/4/06)  
SWMU 452 S-710-44 (by KDWM letter dated 1/4/06)  
SWMU 454 S-743-T-17-01 (by KDWM letter dated 2/14/06)  
SWMU 468 Area West of Plant, north of outfall 015 (by KDWM letter dated 2/14/06)  
SWMU 473 West of C-746-B (by KDWM letter dated 8/28/07)  
SWMU 475 C-745-G5-01 (by KDWM letter dated 2/14/06)  
SWMU 476 Concrete Crusher (by KDWM letter dated 2/14/06)  
SWMU 525 Concrete Water Tower Supports (by KDWM letter dated 8/28/07)  
SWMU 527 C-410 GSA/SAA at Column J6 (by KDWM letter dated 8/28/07)



SWMU 528 GSA/SAA at the northwest corner of the C-745-G3 Paint Enclosure (by KDWM letter dated 2/14/06)

SWMU 530 Soil and Debris Storage Area by C-745-T Yard (by KDWM letter dated 3/8/07)

SWMU 535 Satellite Accumulation Area at C-755 Trailer 8 (by KDWM letter dated 2/14/06)

SWMU 537 SAA located at southeast corner of C-400 (by KDWM letter dated 2/14/06)

SWMU 538 S-MST-01-01 and S-MST-01-02 (by KDWM letter dated 2/14/06)

SWMU 539 S-MST-02-01 and S-MST-02-02 (by KDWM letter dated 2/14/06)

SWMU 540 S-MST-03-01 and S-MST-03-02 (by KDWM letter dated 2/14/06)

SWMU 546 Diesel Fuel Spill/Leak @ Post 67 (by KDWM letter dated 2/14/06)

SWMU 547 Diesel Fuel Spill/Leak @ Post 38 (by KDWM letter dated 2/14/06)

SWMU 548 Staging Area for Concrete Piers, Rubble and Wood from C-745-B Cylinder Yard (by KDWM letter dated 8/28/07)

SWMU 551 G-755-DMSA-23 located at C-755 on the East Fence Line (by KDWM letter dated 8/28/07)

SWMU 552 C-760 Gravel Pad (by KDWM letter dated 3/8/07)

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The Description of SWMU 143 was changed from "C-750-B 10,000-Gallon Gasoline Tank (UST)" to "C-750-B 10,000-Gallon Diesel Tank (UST)" to correct a typographical error.

The Description of SWMUs 416 and 417 were changed from "G-746-1-01" and "G-746-1-01" to "G-746-X-01" and "G-746-X-01", respectively, to correct typographical errors.

The Description of SWMU 528 was changed from "GSA/SAA at the northeast corner of the C-745-G3 Paint Enclosure" to "GSA/SAA at the northwest corner of the C-745-G3 Paint Enclosure" to correct a typographical error.

The Description of SWMU 538 was changed from "S-MST-03-01 & S-MST-03-02 [Mobile Trailer 01]" to "S-MST-01-01 & S-MST-01-02 [Mobile Trailer 01]" to correct a typographical error.

**Appendix A-4 (a)**

**Solid Waste Management Units or Areas of Concern that are DOE Material Storage Areas (DMSAs) for which the permittee has submitted SWMU Assessment Reports and are under review by the Cabinet**

Added the following SWMUs to Appendix A-4 (a):

SWMU 553 C-331-17 (by DOE letter dated 12/16/05)  
SWMU 554 C-331-18 (by DOE letter dated 12/16/05)  
SWMU 555 C-331-21 (by DOE letter dated 12/16/05)  
SWMU 556 C-337-22 (by DOE letter dated 12/16/05)  
SWMU 557 C-337-24 (by DOE letter dated 12/16/05)  
SWMU 558 C-337-26 (by DOE letter dated 12/16/05)  
SWMU 559 C-337-28 (by DOE letter dated 12/16/05)  
SWMU 560 C-333-16 (South) (by DOE letter dated 3/16/06)

**Appendix A-4 (b)**

**Solid Waste Management Units and Areas of Concern that have SWMU Assessment Reports Under Review by the Cabinet**

Removed the following SWMUs from Appendix A-4(b):

SWMU 360 Generator Staging Area C-535 (by KDWM letter dated 1/4/06)  
SWMU 361 C-727-90-Day Area (by KDWM letter dated 8/28/07)  
SWMU 362 Generator Staging Area G-310-04 (by KDWM letter dated 8/28/07)  
SWMU 363 Generator Staging Area G-331-03 (by KDWM letter dated 6/29/04)  
SWMU 364 Generator Staging Area G-331-05 (by KDWM letter dated 6/29/04)  
SWMU 368 Generator Staging Area G-331-08 (by KDWM letter dated 6/29/04)  

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SWMU 377 G-337-22 (by KDWM letter dated 1/4/06)  
SWMU 382 G-340-06 (by KDWM letter dated 8/28/07)  
SWMU 386 G-410-01 (by KDWM letter dated 8/28/07)  
SWMU 387 G-416-01 (by KDWM letter dated 8/28/07)

SWMU 391 G-537-01 (by KDWM letter dated 1/4/06)  
SWMU 392 G-540-A-01 (by KDWM letter dated 2/14/06)  
SWMU 393 G-540-A-1-02 (by KDWM letter dated 2/14/06)  
SWMU 395 G-600-01 (by KDWM letter dated 3/8/07)  
SWMU 396 G-611-U-01 (by KDWM letter dated 3/8/07)  
SWMU 397 G-612-01 (by KDWM letter dated 3/8/07)  
SWMU 398 G-612-02 (by KDWM letter dated 3/8/07)  
SWMU 399 G-612-A-01 (by KDWM letter dated 3/8/07)  
SWMU 400 G-635-01 (by KDWM letter dated 3/8/07)  
SWMU 401 G-710 (by KDWM letter dated 1/4/06)  
SWMU 405 G-720-22 (by KDWM letter dated 2/14/06)  
SWMU 406 G-743-T-17-01 (by KDWM letter dated 6/29/04)  
SWMU 407 G-743-T-17-02 (by KDWM letter dated 3/8/07)  
SWMU 408 G-745-B-01 (by KDWM letter dated 3/8/07)  
SWMU 409 G-745-T-01 (by KDWM letter dated 2/14/06)  
SWMU 410 G-746-G-01 (by KDWM letter dated 6/29/04)  
SWMU 411 G-746-G-1-01 (by KDWM letter dated 3/8/07)  
SWMU 412 G-746-G-2-01 (by KDWM letter dated 11/1/04)  
SWMU 413 G-746-G-3-01 (by KDWM letter dated 11/1/04)  
SWMU 414 G-746-F-01 (by KDWM letter dated 1/4/06)  
SWMU 415 G-746-S-01 (by KDWM letter dated 8/28/07)  
SWMU 416 G-746-X-01 (by KDWM letter dated 3/8/07)  
SWMU 417 G-746-X-01 (by KDWM letter dated 3/8/07)  
SWMU 418 G-748-B-01 (by KDWM letter dated 6/30/04)  
SWMU 419 G-752-C-01 (by KDWM letter dated 8/28/07)  
SWMU 420 G-752-C-02 (by KDWM letter dated 3/8/07)  
SWMU 421 G-754-01 (by KDWM letter dated 1/4/06)  
SWMU 429 S-310-04 (by KDWM letter dated 8/28/07)  
SWMU 430 S-331-02 (by KDWM letter dated 1/4/06)  
SWMU 432 S-335-09 (by KDWM letter dated 1/4/06)  
SWMU 440 S-410-05 (by KDWM letter dated 8/28/07)  
SWMU 441 S-540-A-2-01 (by KDWM letter dated 6/30/04)  
SWMU 442 S-612-01 (by KDWM letter dated 2/14/06)

SWMU 443 S-709-01 (by KDWM letter dated 6/30/04)  
SWMU 444 S-709-02 (by KDWM letter dated 6/30/04)  
SWMU 445 S-710-05 (by KDWM letter dated 2/14/06)  
SWMU 447 S-710-09 (by KDWM letter dated 9/11/03)  
SWMU 450 S-710-32 (by KDWM letter dated 1/4/06)  
SWMU 452 S-710-44 (by KDWM letter dated 1/4/06)  
SWMU 454 S-743-T-17-01 (by KDWM letter dated 2/14/07)  
SWMU 463 C-746-A East Smelter (by KDWM letter dated 8/30/07)  
SWMU 464 C-746-A West Smelter (by KDWM letter dated 8/30/07)  
SWMU 468 Area west of plant, north of outfall 015 (by KDWM letter dated 2/14/06)  
SWMU 473 West of C-746-B (by KDWM letter dated 8/28/07)  
SWMU 475 C-745-G5-01 (by KDWM letter dated 2/14/06)  
SWMU 476 Concrete Crusher (by KDWM letter dated 2/14/06)  
SWMU 525 KOW Water Tower Concrete Supports (by KDWM letter dated 8/28/07)  
SWMU 527 C-410 GSA/SAA at Column J6 (by KDWM letter dated 8/28/07)  
SWMU 528 GSA/SAA at the northwest corner of the C-745-G3 Paint Enclosure (by KDWM letter dated 2/14/06)  
SWMU 530 Soil and Debris Storage Area by C-745-T Yard (by KDWM letter dated 3/8/07)  
SWMU 535 Satellite Accumulation Area at C-755 Trailer 8 (by KDWM letter dated 2/14/06)  
SWMU 537 SAA located at southeast corner of C-400 (by KDWM letter dated 2/14/06)  
SWMU 538 S-MST-01-01 & S-MST-01-02 [Mobile Trailer 01] (by KDWM letter dated 2/14/06)  
SWMU 539 S-MST-02-01 & S-MST-02-02 [Mobile Trailer 02] (by KDWM letter dated 2/14/06)  
SWMU 540 S-MST-03-01 & S-MST-03-02 [Mobile Trailer 03] (by KDWM letter dated 2/14/06)  
SWMU 546 Diesel Fuel Spill/Leak @ Post 67 (by KDWM letter dated 2/14/06)  
SWMU 547 Diesel Fuel Spill/Leak @ Post 68 (by KDWM letter dated 2/14/06)  
SWMU 548 Staging Area for Concrete Piers, Rubble and Wood from C-745-B Cylinder Yard (by KDWM letter dated 8/28/07)  
SWMU 551 GSA at C-755 east fence line (by KDWM letter dated 8/28/07)

#### Appendix A-5

##### **Groundwater Operable Unit Southwest Plume Sources**

Removed the following SWMU from Appendix A-5 GWOU – SW Plume Sources:

SWMU 4 C-747 Contaminated Burial Ground (by KDWM letter dated 8/30/07)

Note: The word “Sources” was added to the title for consistency with the 2006 SMP.

#### Appendix A-5

##### **Decontamination and Decommissioning Operable Unit Inactive Facilities**

Added the following SWMUs to Appendix A-5 D & D OU – Inactive Facilities:

SWMU 463 C-746-A East End Smelter (by KDWM letter dated 8/30/07)

SWMU 464 C-746-A West End Smelter (by KDWM letter dated 8/30/07)

Removed the following SWMU from Appendix A-5 D & D OU – Inactive Facilities:

SWMU 483 Nitrogen Generating Facilities (by KDWM letter dated 8/30/07)

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Spaces were added to the descriptions of SWMUs 498, 499, 500, 510 and 511 to correct typographical errors.

#### Appendix A-5

##### **Site-Wide Soils Operable Unit**

Added the following SWMUs to Appendix A-5 Site-Wide Soils OU:

SWMU 94 KOW Trickling Filter and Leach Field (by KDWM letter dated 5/23/96)

SWMU 95 KOW Burn Area (by KDWM letter dated 5/23/96)

SWMU 157 KOW Toluene Spill Area (by KDWM letter dated 5/23/96)

SWMU 483 Nitrogen Generating Facilities (by KDWM letter dated 8/30/07)

Removed the following SWMUs from Appendix A-5 Site-Wide Soils OU:

SWMU 201 Northwest Groundwater Contamination Plume (*IRA for NW Plume ROD: 7/93*)

SWMU 202 Northeast Groundwater Contamination Plume (*IRA for NE Plume ROD: 6/95*)

\*\*\*\*\*

The following note was added at the bottom of Appendix A-5 Site-Wide Soil OU:

SWMUs 94, 95 and 157 will be investigated and remediated by the U.S. Army Corps of Engineers (COE). If these units are not properly investigated and/or remediated by the COE, the Permittee will assess and augment investigative and remedial activities to fully meet the requirements pursuant to Part IV of this Permit.

#### Appendix A-5

#### **Surface Water Operable Unit Off-Site**

Added the following SWMU to Appendix A-5 Surface Water Operable Unit Off-Site:

SWMU 182 Western Portion of Yellow Waterline (5/23/96)

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The following note was added at the bottom of Appendix A-5 Surface Water Operable Unit Off-Site:

SWMU 182 will be investigated and remediated by the U.S. Army Corps of Engineers (COE). If these units are not properly investigated and/or remediated by the COE, the Permittee will assess and augment investigative and remedial activities to fully meet the requirements pursuant to Part IV of this Permit.

### **Appendix A-6**

#### **Solid Waste Management Units Addressed by Records of Decisions**

Added the following SWMUs to Appendix 6 Solid Waste Management Units Addressed by Records of Decisions:

SWMU 11 C-400 Trichloroethylene Leak Site (*IRA for the GWOU for the VOC Contamination at the C-400 Building ROD: 7/05*)

SWMU 533 Trichloroethene (5/21/03)

\*\*\*\*\*

The following tables were added for consistency with the 2006 Site Management Plan:

### **Appendix A-5**

#### **Groundwater Operable Unit Dissolved-Phase Plumes**

SWMU 201 Northwest Groundwater Plume

SWMU 202 Northeast Groundwater Plume

SWMU 210 Southwest Groundwater Plume

### **Appendix A-5**

#### **Final Comprehensive Site-Wide Operable Unit**

SWMU 6 C-746-K Inactive Sanitary Landfill

SWMU 91 UF<sub>6</sub> Cylinder Drop Test Pit

SWMU 100 Fire Training Area

Appendix A-1

Solid Waste Management Units and Areas of Concern Requiring an RFI

SWMU/AOC	DESCRIPTION
1	C-747-C Oil Landfarm
2	C-749 Uranium Burial Ground
4	C-747 Contaminated Burial Ground
5	C-746-F Classified Burial Ground
6	C-747-B Burial Ground
7	C-747-A Burial Ground
8	C-746-K Inactive Sanitary Landfill
9*	C-746-S Residential Landfill
10*	C-746-T Inert Landfill
11	C-400 Trichloroethylene Leak Site
12	C-747-A UF <sub>4</sub> Drum Yard
13	C-746-P Clean Scrap Yard
14	C-746-E Contaminated Scrap Yard
15	C-746-C Scrap Yard
16	C-746-D Classified Scrap Yard
17	C-616-E Sludge Lagoon
18	C-616-F Full Flow Lagoon
19	C-410-B HF Neutralization Lagoon
20	C-410-E HF Emergency Holding Pond
21	C-611-W Sludge Lagoon
22	C-611-Y Overflow Lagoon
23	C-611-V Lagoons
26	C-400 to C-404 Underground Transfer Line
27	C-722 Acid Neutralization Tank
28	C-712 Acid Neutralization Tank
30	C-747-A Burn Area
31	C-720 Compressor Pit Water Storage Tank
32	C-728 Clean Wash Oil Tank
33	C-728 Motor Cleaning Facility
38	C-615 Sewage Treatment Plant
40	C-403 Neutralization Tank
41	C-410-C Neutralization Tank
42	C-616 Chromate Reduction Facility
47	C-400 Technetium Storage Tank Area
55	C-405 Incinerator
56	C-540-A PCB Waste Staging Area
57	C-541-A PCB Waste Staging Area
58	N-S Diversion Ditch (Outside Plant Security Area)
59	N-S Diversion Ditch (Inside Plant Security Area)
60	C-375-E2 Effluent Ditch (KPDES 002)



Appendix A-1

Solid Waste Management Units and Areas of Concern Requiring an RFI

SWMU/AOC	DESCRIPTION
61	C-375-E5 Effluent Ditch (KPDES 013)
62	C-375-S6 Southwest Ditch (KPDES 009)
63	C-375-W7 Oil Skimmer Ditch (KPDES 008)
64	Little Bayou Creek
65	Big Bayou Creek
66	C-375-E3 Effluent Ditch (KPDES 010 Ditch)
67	C-375-E4 Effluent Ditch (KPDES 011)
68	C-375-W8 Effluent Ditch (KPDES 015)
69	C-375-W9 Effluent Ditch (KPDES 001)
70	C-333-A Vaporizer
71	C-337-A Vaporizer
74	C-340 PCB Transformer Spill Site
75	C-633 PCB Spill Site
76	C-632-B Sulfuric Acid Storage Tank
77	C-634-B Sulfuric Acid Storage Tank
78	C-420 PCB Spill Site
79	C-611 PCB Spill Site
80	C-540-A PCB Spill Site
81	C-541 PCB Spill Site
82	C-531 Electric Switchyard
83	C-533 Electric Switchyard
84	C-535 Switchyard
85	C-537 Switchyard
86	C-631 Pump house and Cooling Tower
87	C-633 Pump house and Cooling Tower
88	C-635 Pump house and Cooling Tower
89	C-637 Pump house and Cooling Tower
91	UF <sub>6</sub> Cylinder Drop Test Pit
92	Fill Area for Dirt from the C-420 PCB Spill Site
93	Concrete Rubble Pile
94**	KOW Trickling Filter and Leach Field
95**	KOW Burn Area
97	C-601 Diesel Spill
98	C-400 Basement Sump
99	C-745 Kellogg Building Site
100	Fire Training Area
101	C-340 Hydraulic System
102	Plant Storm Sewer
105-109, 113 & 129	Concrete Rubble Pile(s)

# Appendix A-1

## Solid Waste Management Units and Areas of Concern Requiring an RFI

SWMU/AOC	DESCRIPTION
135	C-333 PCB Soil Contamination (North Side of C-333)
137	C-746-A Inactive PCB Transformer Area
138	C-100 South Side Berms
145	Residential/Inert Landfill Borrow Area
153	C-331 PCB Soil Contamination (West)
154	C-331 PCB Soil Contamination (Southeast)
155	C-333 PCB Soil Contamination (West)
156	C-310 PCB Soil Contamination (West)
157**	KOW Toluene Spill Area
158	Chilled Water System Leak Site
159	C-746-H3 Storage Pad
160	C-745 Cylinder Yard Spoils Area (PCB Soils)
161	C-743-T01 Trailer Site (Soil Backfill)
162	C-617-A Sanitary Water Line (Soil Backfill)
163	C-304 Building/HVAC Piping System (Soil Backfill)
164	KPDES Outfall Ditch 017 Flume (Soil Backfill)
165	C-616-L Pipeline and Vault Soil Contamination
166	C-100 Trailer Complex Soil Contamination (East)
167	C-720 Whiteroom Sump
168	KPDES Outfall Ditch 012
169	C-410-E HF Vent Surge Protection Tank
170	C-729 Acetylene Building Drain Pits
171	C-617-A Lagoons
172	C-726 Sandblasting Facility
175	Concrete Rubble Pile (28)
176	C-331 RCW Leak Northwest Side
177	C-331 RCW Leak East Side
178	C-724-A Paint Spray Booth
179	Plant Sanitary Sewer System
180	Outdoor Firing Range (WKWMA)
181	Outdoor Firing Range (PGDP)
182**	Western Portion of Yellow Waterline
183	McGraw UST
185	C-611-4 Horseshoe Lagoon
192	C-710 Acid Interceptor Pit
193	McGraw Construction Facilities (Southside Cylinder Yards)
194	McGraw Construction Facilities (Southside)
195	Curlee Road Contaminated Soil Mound
196	C-746-A Septic Tank
198	C-410-D Area Soil Contamination

# Appendix A-1

## Solid Waste Management Units and Areas of Concern Requiring an RFI

SWMU/AOC	DESCRIPTION
199	Big Bayou Creek Monitoring Station
200	Soil Contamination South of TSCA Waste Storage Facility
201	Northwest Groundwater Contamination Plume
202	Northeast Groundwater Contamination Plume
203	C-400 Sump
204	Dykes Road Historical Staging Area
205	Eastern Portion of the Yellow Water Line
209	C-720 Compressor Shop Pit Sump
210	Southwest Groundwater Contamination Plume
211	C-720 TCE Spill Site
212	C-745-A Radiological Contamination Area
213	DMSA OS-2
214	DMSA OS-3
215	DMSA OS-4
216	DMSA OS-5
217	DMSA OS-6
218	DMSA OS-7
219	DMSA OS-8
220	DMSA OS-9
221	DMSA OS-10
222	DMSA OS-11
223	DMSA OS-12
224	DMSA OS-13
225	DMSA OS-14
226	DMSA OS-15
227	DMSA OS-16
228	DMSA OS-17
229	DMSA OS-18
378	Generator Staging Area G-340-01
379	Generator Staging Area G-340-03
380	Generator Staging Area G-340-04
381	Generator Staging Area G-340-05
434	Satellite Accumulation Area S-340-01
463	C-746-A East End Smelter
464	C-746-A West End Smelter
477	C-340 Metals Plant
478	C-410/420 Feed Plant
480	C-402 Lime House
482	C-415 Feed Plant Storage Building
483	Nitrogen Generating Facilities

# Appendix A-1

## Solid Waste Management Units and Areas of Concern Requiring an RFI

SWMU/AOC	DESCRIPTION
488	PCB Contamination Area Near the C-410 Trailer Complex
489	Septic Tank North of the C-710 Laboratory
492	Contaminated Soil Area, Near Outfall 010
493	Concrete Rubble Piles near Outfall 001
494	C-410 Ash Removal Systems
495	C-410-I Ash Receiver Shed
496	C-410 Fluorine/Hydrogen Filters
497	C-410 Neutralization Room Inverter Vat
498	C-410/420 Complex – Sump at Columns D & E – 1 & 2
499	C-410/420 Complex – Sump at Column H-9 & 10
500	C-410/420 Complex – Sump at Column U-10 & 11
501	C-410/420 Complex – Scale Pit Sumps A & B
502	C-410/420 Complex – Sump at Column U-9
503	C-410/420 Complex – Sump at Column G-1
504	C-410/420 Complex – Sump at Column L-10
505	C-410/420 Complex – Sump at Column A-3N
506	C-410/420 Complex – Sump at Column Wa-9
507	C-410/420 Complex – Condensate Tank Pit
508	C-410/420 Complex – Settling Basin
509	C-410/420 Complex – Drain Pit
510	C-410/420 Complex – Sump at Column P & Q-2
511	C-410/420 Complex – Sump at Column Q & R-2
512	C-410/420 Complex – Sump at Column R-2
513	C-411 Cell Maintenance Room Sump Pit
514	C-340 Reject Magnesium Fluoride Storage Silo
515	C-340 “Dirty” Dust Collection System
516	C-340 Derby Preparation Area Sludge Collection System
517	Rubble and Debris Erosion Control Fill Area
518	Field South of C-746-P Yard
520	Scrap Metal West of C-746-A
521	C-340 Saw System Degreaser
522	Work Pit at Ground Floor Level
523	C-340 Metals Plant Pit Ground Floor at F-6 to F-11
524	C-340 Pickling System Sump
526	Internal Plant Ditches
529	C-340 Powder Plant Sump at Ground Floor Level
531	Aluminum Slag Reacting Area (C-746-H4) Near the C-746-A Facility
533	Trichloroethene Spill Site from Historical TCE Unloading Operations at C-400
541	Contaminated Soil Area South of Outfall 011
549	Dirt/Concrete Rubble Pile Located at South Bank of Outfall 008

Appendix A-1

Solid Waste Management Units and Areas of Concern Requiring an RFI

SWMU/AOC	DESCRIPTION
550	Concrete Culvert Sections, west of Outfall 001 ditch

- \* Investigation and remediation activities are limited to groundwater issues.
- \*\* Units 94, 95, 157 and 182 will be investigated and remediated by the U.S. Army Corp of Engineers (COE). If these units are not properly investigated and/or remediated by the COE, the Permittee will assess and augment investigative and remedial activities to fully meet the requirements pursuant to Part IV of this Permit.

Appendix A-2

Solid Waste Management Units and Areas of Concern that Require No Further Action at this Time

SWMU/AOC	DESCRIPTION
24**	C-750-D Underground Storage Tank
25**	C-750 1,000-Gallon Waste Oil Tank
29	C-746-B TRU Storage Area
34	C-746-M PCB Waste Storage Area
35	C-337 PCB Waste Storage Area
36	C-337 PCB Waste Staging Area
37	C-333 PCB Waste Storage Area
39	C-746-B PCB Waste Storage Area
43	C-746-B Waste Chemical Storage Area
45	C-746-R Waste Solvent Storage Area
46	C-409 Hazardous Waste Pilot Plant
49	C-400 B Waste Solution Storage Tank
50	C-400-C Nickel Stripper Evaporation Tank
51	C-400-D Lime Precipitation Tank
52	C-400 Waste Decontamination Solution Storage Tanks
53	C-400 NaOH Precipitation Unit
54	Degreaser Solvent Recovery Unit
AOC 72**	C-200 Underground Gasoline Tanks
AOC 73**	C-710 Underground Gasoline Tank
90	C-720 Underground Petroleum Naphtha Pipe
96	C-333 Cooling Tower Scrap Wood Pile
103, 104, 110-112, 114-128	Concrete Rubble Piles
130	550 Gallon Gasoline UST (West of C-611)
131	C-611 50-Gallon Underground Storage Tank
132	2,000 Gallon Oil UST (North of C-611)
133	Unknown size, grouted UST (South of C-611)
134	C-611 Underground Diesel Tank
136	C-740 Spill Site, (Northwest Corner, C-740 Concrete Pad)
139**	C-746-A1 UST
140**	C-746-A2 UST
141	C-720 Inactive TCE Degreaser
142**	C-750-A Gasoline UST
143**	C-750-B 10,000-Gallon Diesel (UST)
146-152	Concrete Rubble Piles (#40 - #46)
173	C-746-A Trash Sorting Facility
174	C-745-K Low Level Storage Area
184	Concrete Rubble Pile

# Appendix A-2

Solid Waste Management Units and Areas of Concern that Require No Further Action at this Time

SWMU/AOC	DESCRIPTION
186	C-751 Fuel Facility
187	C-611 Septic System
188	C-333 Septic System
189	C-637 Septic System
190	C-337A Sewage Treatment Aeration Tank
191	C-333A Sewage Treatment Aeration Tank
197	Concrete Rubble Pile
206***	C-753-A Toxic Substance Control Act Waste Storage Building
208*	C-746-U Contained Landfill
360	C-535
361	C-727-90-Day Area
362	G-310-04
363	G-331-03
364	G-331-05
365	Generator Staging Area G-333-02
366	Generator Staging Area G-333-03
367	Generator Staging Area G-333-04
368	G-333-08
369	Generator Staging Area G-333-10
370	Generator Staging Area G-333-20
371	G-335-01
372	Generator Staging Area G-337-02
373	G-337-03
374	G-337-13
375	G-337-14
376	G-337-15
377	G-337-22
382	G-340-06
383	Generator Staging Area G-400-01
384	Generator Staging Area G-400-02
385	Generator Staging Area G-409-25
386	G-410-01
387	G-416-01
388	C-416
389	G-533-01
390	G-535-02
391	G-537-01
392	G-540-A-01
393	G-540-A-1-02

# Appendix A-2

Solid Waste Management Units and Areas of Concern that Require No Further Action at this Time

SWMU/AOC	DESCRIPTION
394	G-541-A-01
395	G-600-01
396	G-611-U-01
397	G-612-01
398	G-612-02
399	G-612-A-01
400	G-635-01
401	G-710
402	G-710-04
403	G-710-20
404	G-710-24
405	G-720-22
406	G-743-T-17-01
407	G-743-T-17-02
408	G-745-B-01
409	G-745-T-01
410	G-746-G-01
411	G-746-G-1-01
412	G-746-G-2-01
413	G-746-G-3-01
414	G-746-F-01
415	G-746-S-01
416	G-746-X-01
417	G-746-X-01
418	G-748-B-01
419	G-752-C-01
420	G-752-C-02
421	G-754-01
422	G-755-A-01
423	G-755-C-01
424	G-755-T-07-01
425	G-755-T-08
426	G-755-T-2-3-01
427	G-755-T-3-1-01
428	G-755-T-3-2-01
429	S-310-04
430	S-331-02
431	Satellite Accumulation Area S-333-12
432	S-335-09



Appendix A-2

Solid Waste Management Units and Areas of Concern that Require No Further Action at this Time

SWMU/AOC	DESCRIPTION
433	S-337-11
435	Satellite Accumulation Area S-409-100
436	Satellite Accumulation Area S-409-20
437	Satellite Accumulation Area S-409-40
438	Satellite Accumulation Area S-409-60
439	Satellite Accumulation Area S-409-80
440	S-410-05
441	S-540-A-2-01
442	S-612-01
443	S-709-01
444	S-709-02
445	S-710-05
446	S-710-06
447	S-710-09
448	S-710-16
449	S-710-18
450	S-710-32
451	S-710-41
452	S-710-44
453	S-710-46
454	S-743-T-17-01
455	S-755-T-16-01
456	S-755-T-16-02
457	S-755-T-16-03
458	S-755-T-2-3-01
459	S-755-T-3-1-01
460	S-755-T-3-2-01
461	S-755-T-3-2-02
462	S-755-T-3-2-03
468	Area West of plant, north of outfall 015
473	West of C-746-B
475	C-745-G5-01
476	Concrete Crusher
479	C-204 Disintegrator Building
481	C-410-A Hydrogen Holder
484	C-611-M Storage Tank
485	C-611-N Sanitary Water Storage
490**	McGraw Fuel Facility Waste Oil UST
491	Mercury Spill at the C-611 Water Treatment Plant Vault

## Appendix A-2

Solid Waste Management Units and Areas of Concern that Require No Further Action at this Time

SWMU/AOC	DESCRIPTION
519	C-410 Sulfuric Acid Tank
525	Concrete Water Tower Supports
527	C-410 GSA/SAA at Column J6
528	GSA/SAA at the northwest corner of the C-745-G3 Paint Enclosure
530	Soil and Debris Storage Area by C-745-T Yard
532	Photographic Solution Treatment Area in the C-102 Building
534**	UST #18 within SWMU 193
535	Satellite Accumulation Area at C-755 Trailer 8
536	Concrete Truck Washout Area
537	SAA located at southeast corner of C-400
538	S-MST-01-01 and S-MST-01-02 [Mobile Trailer 01]
539	S-MST-02-01 and S-MST-02-02 [Mobile Trailer 02]
540	S-MST-03-01 and S-MST-03-02 [Mobile Trailer 03]
542a	G-746-B-01, S-746-B-01, S-746-B-02
542b	G-746-A-01, S-746-A-01, S-746-A-02
543	T-746-S-01
544	T-752-C-01
545	S-755-T-22-01 & G-755-T-22, SSA and GSA
546	Diesel Fuel Spill/Leak @ Post 67
547	Diesel Fuel Spill/Leak @ Post 38
548	Staging Area for Concrete Piers, Rubble and Wood from C-745-B Cylinder Yard
551	G-755-DMSA-23 located at C-755 on the East Fence Line
552	C-760 Gravel Pad

\* This SWMU is permitted under a State of Kentucky Solid Waste Permit. The Kentucky Solid Waste program contains provisions for groundwater monitoring and closure.

\*\* These SWMUs will be addressed by the Kentucky Underground Storage Tank Program (Subtitle I).

\*\*\* These SWMUs are addressed by the Toxic Substance and Control Act (TSCA)

Appendix A-3

Solid Waste Management Units which are permitted "Treatment, Storage or Disposal" Units

SWMU/AOC	DESCRIPTION
3	C-404 Low Level Radioactive Waste Burial Ground
44	C-733 Hazardous Waste Storage Area
46A	C-746-Q Hazardous and Low Level Mixed Waste Storage Building
144	C-746-A Hazardous and Mixed Waste Storage Facility
207	C-752-A Environmental Restoration Waste Storage Building

Appendix A-4(a)

Solid Waste Management Units or Areas of Concern that are DOE Material Storage Areas (DMSAs) for which the permittee has submitted SWMU Assessment Reports and are under review by the Cabinet

SWMU/AOC	DESCRIPTION
48	C400-03
213	OS-02
214	OS-03
215	OS-04
216	OS-05
217	OS-06
218	OS-07
219	OS-08
220	OS-09
221	OS-10
222	OS-11
223	OS-12
224	OS-13
225	OS-14
226	OS-15
227	OS-16
228	OS-17
229	OS-18
230	C-310-A-01
231	C-310-02
232	C-310-03
233	C-310-04
234	C-310-05
235	C-331-01
236	C-331-02
237	C-331-03
238	C-331-04
239	C-331-05
240	C-331-06
241	C-331-07
242	C-331-08
243	C-331-09
244	C-331-10
245	C-331-11
246	C-331-12
247	C-331-13
248	C-331-14
249	C-331-15

Appendix A-4(a)

Solid Waste Management Units or Areas of Concern that are DOE Material Storage Areas (DMSAs) for which the permittee has submitted SWMU Assessment Reports and are under review by the Cabinet

SWMU/AOC	DESCRIPTION
250	C-331-16
251	C-331-19
252	C-331-20
253	C-331-22
254	C-331-23
255	C-331-24
256	C-333-01
257	C-333-02
258	C-333-03
259	C-333-04
260	C-333-05
261	C-333-06
262	C-333-07
263	C-333-08
264	C-333-09
265	C-333-10
266	C-333-11
267	C-333-12
268	C-333-13
269	C-333-14
270	C-333-15
271	C-333-16 (West)
272	C-333-16 (East)
273	C-333-17
274	C-333-18
275	C-333-19
276	C-333-20
277	C-333-21
278	C-333-22
279	C-333-23
280	C-333-24
281	C-333-25
282	C-333-26
283	C-333-27
284	C-333-28
285	C-333-29
286	C-333-30
287	C-333-31

Appendix A-4(a)

Solid Waste Management Units or Areas of Concern that are DOE Material Storage Areas (DMSAs) for which the permittee has submitted SWMU Assessment Reports and are under review by the Cabinet

SWMU/AOC	DESCRIPTION
288	C-333-34
289	C-333-35
290	C-333-37
291	C-333-38
292	C-333-39
293	C-333-40
294	C-333-41
295	C-333-42
296	C-333-43
297	C-335-01
298	C-335-02
299	C-335-03
300	C-335-04
301	C-335-05
302	C-335-06
303	C-335-07
304	C-335-08
305	C-335-09
306	C-335-11
307	C-335-12
308	C-337-01
309	C-337-02
310	C-337-03
311	C-337-04
312	C-337-05
313	C-337-06
314	C-337-07
315	C-337-08
316	C-337-09
317	C-337-10
318	C-337-11
319	C-337-12
320	C-337-13
321	C-337-14
322	C-337-15
323	C-337-16
324	C-337-17
325	C-337-18

Appendix A-4(a)

Solid Waste Management Units or Areas of Concern that are DOE Material Storage Areas (DMSAs) for which the permittee has submitted SWMU Assessment Reports and are under review by the Cabinet

SWMU/AOC	DESCRIPTION
326	C-337-19
327	C-337-20
328	C-337-21
329	C-337-23
330	C-337-25
331	C-337-27
332	C-337-29
333	C-337-30
334	C-337-31
335	C-337-32
336	C-337-33
337	C-337-34
338	C-337-35
339	C-337-36
340	C-337-37
341	C-337-38
342	C-337-39
343	C-337-40
344	C-337-41
345	C-337-42
346	C-337-43
347	C-337-44
348	C-337-45
349	C-400-01
350	C-400-04
351	C-400-05
352	C-400-06
353	C-400-07
354	C-409-01
355	C-409-02
356	C-720-01
357	C-720-02
358	C-720-03
359	C-720-04
553	C-331-17
554	C-331-18
555	C-331-21
556	C-337-22

Appendix A-4(a)

Solid Waste Management Units or Areas of Concern that are DOE Material Storage Areas (DMSAs) for which the permittee has submitted SWMU Assessment Reports and are under review by the Cabinet

SWMU/AOC	DESCRIPTION
557	C-337-24
558	C-337-26
559	C-337-28
560	C-333-16 (South)



Appendix A-4(b)

Solid Waste Management Units or Areas of Concern that have SWMU Assessment Reports Under Review by the Cabinet

SWMU/AOC	DESCRIPTION
465	G yard rubble pile
466	South of Dykes Road, Pond area
467	WKWMA on KOW
469	C-745-J Yard
470	C-746-V Yard
471	South Area outside C-746-B
472	West of C-746-B
474	West of Vortec Site
486	Rubble Pile
487	Rubble Pile

Appendix A-5

Burial Ground Operable Unit (BGOU)

SWMU/AOC	DESCRIPTION
2	C-749 Uranium Burial Ground
3	C-404 Low-Level Radioactive Waste Burial Ground
4	C-747 Contaminated Burial Ground
5	C-746-F Classified Burial Ground
6	C-747-B Burial Ground
7	C-747-A Burial Ground
30	C-747-A Burn Area (BG)
145	Residential/Inert Landfill Borrow Area

Appendix A-5

DUF<sub>6</sub> Decontamination & Decommissioning Operable Unit

SWMU/AOC	DESCRIPTION
183	McGraw UST
193	McGraw Construction Facilities (Southside Cylinder Yards)
194	McGraw Construction Facilities (Southside)

Appendix A-5

GDP Decontamination and Decommissioning Operable Unit

SWMU/AOC	DESCRIPTION
17	C-616-E Sludge Lagoon <sup>A</sup>
18	C-616-F Full Flow Lagoon <sup>A</sup>
21	C-611-W Sludge Lagoon <sup>A</sup>
22	C-611-Y Overflow Lagoon <sup>A</sup>
23	C-611-V Lagoons <sup>A</sup>
28	C-712 Acid Neutralization Tank <sup>A</sup>
33	C-728 Motor Cleaning Facility <sup>A</sup>
38	C-615 Sewage Treatment Plant <sup>A</sup>
42	C-616 Chromate Reduction Facility <sup>A</sup>
70	C-333-A Vaporizer <sup>A</sup>
71	C-337-A Vaporizer <sup>A</sup>
82	C-531 Switchyard <sup>A</sup>
83	C-533 Switchyard <sup>A</sup>
84	C-535 Switchyard <sup>A</sup>
85	C-537 Switchyard <sup>A</sup>
86	C-631 Pump house and Cooling Tower <sup>A</sup>
87	C-633 Pump house and Cooling Tower <sup>A</sup>
88	C-635 Pump house and Cooling Tower <sup>A</sup>
89	C-637 Pump house and Cooling Tower <sup>A</sup>
98	C-400 Basement Sump
159	C-746-H3 Storage Pad <sup>A</sup>
161	C-743-T01 Trailer Site (Soil Backfill) <sup>A</sup>
162	C-617-A Sanitary Water Line (Soil Backfill) <sup>A</sup>
164	KPDES Outfall Ditch 017 Flume (Soil Backfill) <sup>A</sup>
166	C-100 Trailer Complex Soil Contamination (East Side) <sup>A</sup>
167	C-720 Whiteroom Sump
171	C-617-A Lagoon <sup>A</sup>
172	C-726 Sandblasting Facility <sup>A</sup>
178	C-724-A Paint Spray Booth
179	Plant Sanitary Sewer System <sup>A</sup>
192	C-710 Acid Interceptor Pit
198	C-410-D Area Soil Contamination
203	C-400 Sump
209	C-720 Compressor Shop Pit Sump

A = Active facility.

Appendix A-5

Decontamination and Decommissioning Operable Unit Inactive Facilities

SWMU/AOC	DESCRIPTION
41	C-410-C Neutralization Tank
55	C-405 Incinerator
101	C-340 Hydraulic System
378	Generator Staging Area G-340-01
379	Generator Staging Area G-340-03
380	Generator Staging Area G-340-04
381	Generator Staging Area G-340-05
434	Satellite Accumulation Area S-340-01
463	C-746-A East End Smelter
464	C-746-A West End Smelter
477	C-340 Metals Plant
478	C-410/420 Feed Plant
480	C-402 Lime House
482	C-415 Feed Plant Storage Building
494	C-410 Ash Remover Systems
495	C-410-I Ash Receiver Shed
496	C-410 Fluorine/Hydrogen Filters
497	C-410 Neutralization Room Inverter Vat
498	C-410/420 Complex – Sump at Columns D & E – 1 & 2
499	C-410/420 Complex – Sump at Column H-9 & 10
500	C-410/420 Complex – Sump at Column U-10 & 11
501	C-410/420 Complex – Scale Pit Sumps A & B
502	C-410/420 Complex – Sump at Column U-9
503	C-410/420 Complex – Sump at Column G-1
504	C-410/420 Complex – Sump at Column L-10
505	C-410/420 Complex – Sump at Column A-3N
506	C-410/420 Complex – Sump at Column Wa-9
507	C-410/420 Complex – Condensate Tank Pit
508	C-410/420 Complex – Settling Basin
509	C-410/420 Complex – Drain Pit
510	C-410/420 Complex – Sump at Column P & Q-2
511	C-410/420 Complex – Sump at Column Q & R-2
512	C-410/420 Complex – Sump at Column R-2
513	C-411 Cell Maintenance Room Sump Pit
514	C-340 Reject Magnesium Fluoride Storage Silo
515	C-340 “Dirty” Dust Collection System
516	C-340 Derby Preparation Area Sludge Collection System
521	C-340 Saw System Degreaser
522	Work Pit at Ground Floor Level
523	C-340 Metals Plant Pit Ground Floor at F-6 to F-11

Appendix A-5

Decontamination and Decommissioning Operable Unit Inactive Facilities

SWMU/AOC	DESCRIPTION
524	C-340 Pickling System Sump
529	C-340 Powder Plant Sump at Ground Floor Level

Appendix A-5

Groundwater Operable Unit C-400

SWMU/AOC	DESCRIPTION
11	C-400 Trichloroethylene Leak Site
533	Trichloroethene Spill Site from Historical TCE Unloading Operations at C-400

Appendix A-5

Groundwater Operable Unit S&T Landfills

SWMU/AOC	DESCRIPTION
9	C-746-S Residential Landfill
10	C-746-T Inert Landfill



Appendix A-5

Groundwater Operable Unit Southwest Plume Sources

SWMU/AOC	DESCRIPTION
1	C-747-C Oil Land Farm
209	C-720 Compressor Shop Pit Sump
211	C-720 TCE Spill Site Northeast

Appendix A-5

Groundwater Operable Unit Dissolved-Phase Plumes

SWMU/AOC	DESCRIPTION
201	Northwest Groundwater Plume
202	Northeast Groundwater Plume
210	Southwest Groundwater Plume

Appendix A-5

Site-Wide Soils Operable Unit

SWMU/AOC	DESCRIPTION
1	C-747-C Oil Landfarm
11	C-400 Trichloroethylene Leak Site
12	C-747-A UF <sub>4</sub> Drum Yard
13	C-746-P Clean Scrap Yard
14	C-746-E Contaminated Scrap Yard
15	C-746-C Scrap Yard
16	C-746-D Classified Scrap Yard
19	C-410-B Neutralization Lagoon
20	C-410-E HF Emergency Holding Pond
26	C-400 to C-404 Underground Transfer Line
27	C-722 Acid Neutralization Tank <sup>A</sup>
31	C-720 Compressor Pit Waste Storage Tank
32	C-728 Clean Waste Oil Tank <sup>A</sup>
40	C-403 Neutralization Tank
47	C-400 Technetium Storage Tank Area
56	C-540-A PCB Waste Staging Area
57	C-541-A PCB Waste Staging Area
74	C-340 PCB Spill Site
75	C-633 PCB Spill Site
76	C-632-B Sulfuric Acid Storage Tank
77	C-634-B Sulfuric Acid Storage Tank
78	C-420 PCB Spill Site
79	C-611 PCB Spill Site
80	C-540 PCB Spill Site
81	C-541 PCB Spill Site
92	Fill Area for Dirt from the C-420 PCB Spill Site
94**	KOW Trickling Filter and Leach Field
95**	KOW Burn Area
97	C-601 Diesel Spill
99	C-745 Kellogg Building Site
135	C-333 PCB Soil Contamination (North Side of C-333)
137	C-746-A Inactive PCB Transformer/Sump
138	C-100 South Side Berms
153	C-331 PCB Soil Contamination (West Side)
154	C-331 PCB Soil Contamination (Southeast Side)
155	C-333 PCB Soil Contamination (West Side)
156	C-310 PCB Soil Contamination (West Side)
157**	KOW Toluene Spill Area
158	Chilled Water System Leak Site
160	C-745 Cylinder Yard Spoils Area (PCB Soil Contamination)

# Appendix A-5

## Site-Wide Soils Operable Unit

SWMU/AOC	DESCRIPTION
163	C-304 Building/HVAC Piping System (Soil Backfill)
165	C-616-L Pipeline and Vault Soil Contamination <sup>A</sup>
169	C-410-E HF Vent Surge Protection Tank
170	C-729 Acetylene Building Drain Pits
172	C-726 Sandblasting Facility
176	C-331 RCW Leak Northwest Side
177	C-331 RCW Leak East Side
180	Outdoor Firing Range (WKWMA) <sup>A</sup>
181	Outdoor Firing Range (PGDP) <sup>A</sup>
194	McGraw Construction Facilities (Southside)
195	Curlee Road Contaminated Soil Mound
196	C-746-A Septic System
200	Soil Contamination South of TSCA Waste Storage Facility
204	Dykes Road Historical Staging Area
211	C-720 TCE Spill Site Northeast
212	C-745-A Radiological Contamination Area
213	OS-02
214	OS-03
215	OS-04
216	OS-05
217	OS-06
218	OS-07
219	OS-08
220	OS-09
221	OS-10
222	OS-11
223	OS-12
224	OS-13
225	OS-14
226	OS-15
227	OS-16
228	OS-17
229	OS-18
467	Concrete Cylinder Holders Storage Area on WKWMA
483	Nitrogen Generating Facilities
488	PCB Contamination Area Near the C-410 Trailer Complex
489	Septic Tank North of the C-710 Laboratory
492	Contaminated Soil Area, Near Outfall 010
493	Concrete Rubble Piles near Outfall 001
517	Rubble and Debris Erosion Control Fill Area

Appendix A-5

Site-Wide Soils Operable Unit

SWMU/AOC	DESCRIPTION
518	Field South of C-746-P Yard
520	Scrap Metal West of C-746-A
531	Aluminum Slag Reacting Area (C-746-H4) Near the C-746-A Facility

\*\* SWMUs 94, 95 and 157 will be investigated and remediated by the U.S. Army Corps of Engineers (COE). If these units are not properly investigated and/or remediated by the COE, the Permittee will assess and augment investigative and remedial activities to fully meet the requirements pursuant to Part IV of this Permit.

A – Active facility

Appendix A-5

Surface Water Operable Unit Off-Site

SWMU/AOC	DESCRIPTION
64	Little Bayou Creek
65	Big Bayou Creek
93	Concrete Disposal Area East of Plant Security Area
105	Concrete Rubble Pile (3)
106	Concrete Rubble Pile (4)
107	Concrete Rubble Pile (5)
108	Concrete Rubble Pile (6)
109	Concrete Rubble Pile (7)
113	Concrete Rubble Pile (11)
129	Concrete Rubble Pile (27)
175	Concrete Rubble Pile (28)
182**	KOW Standpipe
185	C-611-4 Horseshoe Lagoon
199	Big Bayou Creek Monitoring Station
205	Eastern Portion of Yellow Water Line
541	Contaminated Soil Area Near Outfall 011
549	Concrete Rubble by Outfall 008
550	Concrete Culvert Sections, west of Outfall 001 ditch

\*\* SWMU 182 will be investigated and remediated by the U.S. Army Corp of Engineers (COE). If these units are not properly investigated and/or remediated by the COE, the Permittee will assess and augment investigative and remedial activities to fully meet the requirements pursuant to Part IV of this Permit.

# Appendix A-5

## Surface Water Operable Unit On-Site

SWMU/AOC	DESCRIPTION
58	N-S Diversion Ditch (Outside Plant Security Area)
59	N-S Diversion Ditch (Inside Plant Security Area)
60	C-375-E2 Effluent Ditch (KPDES 002) <sup>A</sup>
61	C-375-E5 Effluent Ditch (KPDES 013) <sup>A</sup>
62	C-375-S6 Southwest Ditch (KPDES 009) <sup>A</sup>
63	C-375-W7 Oil Skimmer Ditch (KPDES 008) <sup>A</sup>
66	C-375-E3 Effluent Ditch (KPDES 010) <sup>A</sup>
67	C-375-E4 Effluent Ditch (C-340 Ditch) <sup>A</sup>
68	C-375-W8 Effluent Ditch (KPDES 015) <sup>A</sup>
69	C-375-W9 Effluent Ditch (KPDES 001) <sup>A</sup>
92	Fill Area for Dirt from the C-420 PCB Spill Site
97	C-601 Diesel Spill
102	Plant Storm Sewer <sup>A</sup>
168	KPDES Outfall Ditch 013 <sup>A</sup>
526	Internal Plant Ditches

A – Active facility.

Appendix A-5

Surface Water Operable Unit Scrap Metal

SWMU/AOC	DESCRIPTION
13	C-746-P Clean Scrap Yard
14	C-746-E Contaminated Scrap Yard
15	C-746-C Scrap Yard
16	C-746-D Classified Scrap Yard



Appendix A-5

Final Comprehensive Site-Wide Operable Unit

SWMU/AOC	DESCRIPTION
8	C-746-K Inactive Sanitary Landfill
91	UF <sub>6</sub> Cylinder Drop Test Pit
100	Fire Training Area

# Appendix A-6

## Solid Waste Management Units Addressed by Records of Decision

SWMU/AOC	DESCRIPTION
8	C-746-K Inactive Sanitary Landfill
11	C-400 Trichloroethylene Leak Site
59	N-S Diversion Ditch (Inside Plant Security Area)
91	UF <sub>6</sub> Cylinder Drop Test Pit
100	Fire Training Area
201	Northwest Groundwater Plume
202	Northeast Groundwater Plume
533	Trichloroethene Spill Site from Historical TCE Unloading Operations at C-400

**APPENDIX D**

**SCHEDULE OF COMPLIANCE**

## APPENDIX D

### SCHEDULE OF COMPLIANCE

Schedule of Compliance	Due Date
Notification of newly identified SWMUs and AOCs (Conditions T-150 and T-151, pg. 28 of 70)	Within fifteen (15) calendar days of discovery
SWMU Assessment Report (Condition T-51, pg 28 of 70)	Within ninety (90) calendar days of notification
RFI Workplan (Condition T-152, pg 29 of 70)	Within one hundred and eighty (180) calendar days after receipt of notification by the Director which SWMUs or AOCs require an RFI
RFI Progress Reports (Condition T-160, pg 31 of 70)	Schedules for submittal of the RFI Progress Reports shall be included in the RFI Work Plans
Draft RFI Report (Condition T-164, pg 32 of 70)	In accordance with the approved RFI Work Plan
Final RFI Report (Condition T-160, pg 32 of 70)	Within sixty (60) calendar days after receipt of the Division's comments on the draft RFI Report
Interim Measures Workplan (Condition T-168, pg 33 of 70)	Within ninety (90) calendar days of notification by the Director or as otherwise addressed in Condition T-168
Interim Measures Progress Reports (Condition T-174, pg 34 of 70)	On or before the 30 <sup>th</sup> day of October and April each fiscal year
Interim Measure Report (Condition T-175, pg 34 of 70)	Within ninety (90) calendar days of completion
CMS Plan (Condition T-176, pg 35 of 70)	Within one hundred and eighty (180) calendar days of notification by the Director that a CMS is needed or in accordance with the schedule in the Final RFI Report
Draft CMS Report (Condition T-179, pg 35 of 70)	In accordance with the schedule defined in the approved CMS Work Plan or in accordance to Appendix D Schedule of

Schedule of Compliance	Due Date
	Compliance
Final CMS Report (Condition T-179, pg 35 of 70)	Within sixty (60) calendar days of the Director's comments on draft CMS Report
Imminent Hazard Report (Conditions T-188 and T-189, pg 37 of 70)	Oral within 2 hours; written within fifteen (15) calendar days
Waste Minimization Certification (Condition T-210, pg 40 of 70)	No less often than annually from effective date of permit
Valve and Pump Monitoring/Inspection Scheduled and Procedures (Conditions T-219 and T-220)	Valves listed in Attachment F shall be monitored monthly. Any valve for which a leak is not detected for two successive months shall be monitored the first month of each succeeding quarter until a leak is detected. If a leak is detected the Permittee shall resume monthly monitoring until a leak is not detected for two successive months  Pumps listed in Attachment F shall be inspected weekly and monitored monthly
Report on valve, pump and/or compressor leaks that were not repaired in accordance with requirements, dates of waste management unit shutdowns, where control devices are in use, the dates in each month during the reporting period when a control device exceeded or operated outside the design specifications which was not corrected within 24 hours (Condition T-224, pg 44 of 70)	Semi-annually beginning six (6) months after the effective date of the permit
GWOU (Southwest Plume and Sources) Proposed Remedial Action Plan (PRAP)	30 days after EPA approval of SI Report
GWOU (Southwest Plume and Sources) ROD	30 days after EPA approval of PRAP
SWOU (Scrap Metal) Removal Action	December 30, 2007

Schedule of Compliance	Due Date
Completion Report	
SWOU (On-Site) Action Memorandum	February 12, 2008
SWOU (On-Site) Removal Action Work Plan	June 12, 2008
BGOU Remedial Investigation Report	July 25, 2008
C-746-A Removal Action Completion Report	June 3, 2008
Soils OU Remedial Investigation Work Plan	March 12, 2009

The above reports must be signed and certified in accordance with 401 KAR 38:070, Section 7.

## **APPENDIX F-9**

### **Record of Decision for Interim Remedial Action for the Groundwater Operable Unit for the Volatile Organic Compound Contamination at the C-400 Cleaning Building**

**Record of Decision for Interim Remedial Action for the  
Groundwater Operable Unit for the  
Volatile Organic Compound Contamination  
at the C-400 Cleaning Building  
at the Paducah Gaseous Diffusion Plant  
Paducah, Kentucky**



**July 2005**

**Cleared for Public Release**



**Record of Decision for Interim Remedial Action for the  
Groundwater Operable Unit for the  
Volatile Organic Compound Contamination  
at the C-400 Cleaning Building  
at the Paducah Gaseous Diffusion Plant  
Paducah, Kentucky**

Date Issued—July 2005

Prepared for the  
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Environmental Management Activities at the  
Paducah Gaseous Diffusion Plant  
~~Paducah, Kentucky 42001~~  
managed by  
Bechtel Jacobs Company LLC  
for the  
U.S. DEPARTMENT OF ENERGY  
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# **DECLARATION FOR THE RECORD OF DECISION FOR INTERIM REMEDIAL ACTION FOR THE GROUNDWATER OPERABLE UNIT FOR THE VOLATILE ORGANIC COMPOUND CONTAMINATION AT THE C-400 CLEANING BUILDING**

## **SITE NAME AND LOCATION**

Volatile Organic Compound Source Zone at C-400  
Groundwater Operable Unit  
Paducah Gaseous Diffusion Plant  
U.S. Department of Energy  
Paducah, Kentucky  
EPA ID – KY8890008982

## **STATEMENT OF BASIS AND PURPOSE**

This Record of Decision (ROD) presents the selected interim remedial action for the Groundwater Operable Unit (OU) volatile organic compound (VOC) source zone, comprised primarily of trichloroethene (TCE), at the C-400 Cleaning Building at the Paducah Gaseous Diffusion Plant (PGDP) near Paducah, Kentucky, and includes discussion of the contribution that this interim remedial action will make toward the final decision for the Groundwater OU at the PGDP. This interim remedial action was chosen in accordance with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 and, to the extent practicable, with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on the Administrative Record (AR) file for this site.

In addition, this decision document has been prepared in accordance with paragraph II E.2 of the *Secretarial Policy Statement on the National Environmental Policy Act* (NEPA) (DOE 1994), which states, "To facilitate meeting the environmental objectives of CERCLA and to respond to concerns of regulators, consistent with the procedures of most other Federal agencies, the U.S. Department of Energy (DOE) hereafter will rely on the CERCLA process for review of actions to be taken under CERCLA and will address NEPA values and public involvement procedures as provided below...Department of Energy CERCLA documents will incorporate NEPA values, such as analysis of cumulative, off-site, ecological, and socioeconomic impacts, to the extent practicable."

A Feasibility Study (FS) for the Groundwater OU was submitted to the U.S. Environmental Protection Agency (EPA) and Commonwealth of Kentucky on August 27, 2001 (DOE 2001). After approval of the FS by EPA and the Commonwealth of Kentucky, a notice of availability of the FS was published in a regional newspaper, *The Paducah Sun*, November 2, 2001, and a public comment period was held from November 2, 2001, to December 17, 2001. The FS provided an evaluation of alternatives for remediation of various VOC sources, such as those comprised of TCE, to the Groundwater OU and described the strategy for addressing these sources at the PGDP. Subsequently, a Proposed Remedial Action Plan (PRAP) for the VOC contamination at the C-400 Cleaning Building (DOE 2004a) was submitted to the EPA and Commonwealth of Kentucky on April 7, 2004. After approval of the PRAP by EPA and the Commonwealth of Kentucky, a notice of availability of the PRAP was published in *The Paducah Sun* on May 31, 2004, and a public comment period was held from June 2, 2004, to July 16, 2004. The Commonwealth of Kentucky concurs with the interim remedial action for the contamination comprised of

TCE and other VOCs<sup>1</sup> at the C-400 Cleaning Building area selected in this document by the DOE and EPA and with the contribution this interim remedial action will make toward the final decision for the Groundwater OU.

## ASSESSMENT OF THE SITE

Elevated concentrations of the VOC TCE and its breakdown products in subsurface soils indicate that dense nonaqueous-phase liquid (DNAPL) source areas exist within the Upper Continental Recharge System (UCRS) soils southeast and southwest of the C-400 Cleaning Building. DNAPLs are liquid chemicals that do not readily dissolve in water and are denser than water. Once in the ground, DNAPLs can migrate downward through the subsurface, with a portion being trapped in the soil's pore spaces. The TCE concentrations detected in the Regional Gravel Aquifer (RGA) during the Waste Area Grouping 6 (WAG 6) Remedial Investigation (RI) (DOE 1999a), which included the area around the C-400 Cleaning Building, indicated a maximum of 701,000 parts per billion (ppb) in groundwater (64% of the maximum solubility of TCE in water) southeast of the C-400 Cleaning Building, suggesting that DNAPL has penetrated the RGA and is acting as a secondary source of groundwater contamination. The response action selected in this ROD is necessary to protect public health or welfare or the environment from actual or threatened releases of hazardous substances into the environment from the source zone comprised of TCE and other VOCs at the C-400 Cleaning Building area.

## DESCRIPTION OF SELECTED REMEDY

The Groundwater OU is one of five media-specific OUs at PGDP being used to evaluate and implement remedial actions. DOE, EPA, and the Commonwealth of Kentucky have agreed upon five strategic cleanup initiatives as follows (from *Site Management Plan*, DOE 2004b):

- Decontamination and Decommissioning (D&D) OU Strategic Initiative,
- Groundwater OU Strategic Initiative,
- Burial Grounds OU Strategic Initiative,
- Surface Water OU Strategic Initiative, and
- Soils OU Strategic Initiative.

The initiatives' objectives include taking early actions as necessary to prevent and reduce exposure and unacceptable risks. This includes completion of a series of prioritized response actions, ongoing site characterization activities to support future response action decisions, and D&D of the currently operating gaseous diffusion plant once it ceases operation, followed by a comprehensive site-wide evaluation, with implementation of additional and final actions as needed to ensure long-term protectiveness. The intended scope, sequence, and timing of the OU initiatives is documented in the *Site Management Plan* (SMP) (DOE 2004b) and in the *Federal Facility Agreement for the Paducah Gaseous Diffusion Plant* (FFA) (EPA 1998).

The primary objectives of these initiatives are to take actions necessary to prevent both on-site and off-site human exposure that presents any unacceptable risk, to ensure safe environmental conditions for

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<sup>1</sup> Other VOCs present in the source zone at the C-400 Cleaning Building area include *trans*-1,2-dichloroethene; *cis*-1,2-dichloroethene; vinyl chloride; 1,1-dichloroethene; tetrachloroethene; carbon tetrachloride; chloroform; 1,1,1-trichloroethane; 1,1,2-trichloroethane; and toluene.